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no. 13

GEOHYDROLOGICAL DATA FOR THE UPPER PAWCATUCK RIVER BASIN RHODE ISLAND



**RHODE ISLAND
WATER RESOURCES
COORDINATING BOARD**

GEOLOGICAL BULLETIN NO. 13

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**GEOHYDROLOGICAL DATA FOR THE
UPPER PAWCATUCK RIVER BASIN,
RHODE ISLAND**

By

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Geologists, U. S. Geological Survey

**RHODE ISLAND
GEOLOGICAL BULLETIN NO. 13**

Prepared by the
UNITED STATES GEOLOGICAL SURVEY
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Geology
CONTENTS

	Page
Abstract-----	1
Introduction -----	1
Purpose and scope -----	3
History -----	4
Personnel and acknowledgments-----	5
Well-numbering and location system-----	6
Geological and geophysical exploration-----	6
Test drilling-----	6
Methods-----	6
Tabulation of data-----	7
Seismic investigation -----	11
Resistivity investigation -----	15
Hydrological observations -----	15
Precipitation-----	15
Evaporation -----	19
Ground-water levels-----	21
Pond levels -----	28
Stream discharge-----	31
Pumping tests -----	43
Quality of water -----	51
References -----	55

ILLUSTRATIONS

	Page
Plate 1. Map of upper Pawcatuck River basin showing locations of wells, test borings, and seismic sites, and precipitation, evaporation, stream discharge, and surface-water quality stations --	In pocket
Figure 1. Index map of Rhode Island showing upper Pawcatuck River basin -----	2
2. Pumping-test data in the upper Pawcatuck River basin -----	44

12 June 1963, div. g., no. 13, Ser.

TABLES

	Page
Table 1. Physical properties of unconsolidated deposits and logs of wells in the upper Pawcatuck River basin -----	8
2. Preliminary seismic data and altitude of bedrock surface-----	12
3. Daily precipitation, in inches, at four stations in upper Pawcatuck River basin-----	16
4. Daily evaporation, in inches, at four stations in the upper Pawcatuck River basin-----	20
5. Summary of ground-water levels for observation wells in the upper Pawcatuck River basin -----	22
6. Water levels in selected observation wells in the upper Pawcatuck River basin-----	26
7. Gage heights, in feet above gage zero, at six pond-stage stations in the upper Pawcatuck River basin-----	29
8. Gaging station records for upper Pawcatuck River basin -----	32
9. Low-flow discharge measurements at six miscellaneous sites in the upper Pawcatuck River basin -----	42
10. Chemical analyses of surface water-----	52
11. Chemical analyses of ground water-----	53
12. Records of selected wells-----	56

GEOHYDROLOGICAL DATA FOR THE UPPER PAWCATUCK RIVER BASIN, RHODE ISLAND

By
William B. Allen, Glenn W. Hahn, and Curtis R. Tuttle

ABSTRACT

This is the first of two reports on the geohydrology of the upper Pawcatuck River basin in southern Rhode Island. It is a basic-data report and includes descriptions, tables, and illustrations of records collected during test-well construction and seismic investigations and measurements of precipitation, evaporation, ground-water level fluctuations and stream discharge over a 2 year period from January 1958 through December 1959. Quality-of-water data also are included. Why and how the data were collected and their limitations are discussed.

INTRODUCTION

The upper Pawcatuck River basin is west of Narragansett Bay in the southern part of Rhode Island. It is an elongated, irregularly-shaped area between lat $41^{\circ}24'15''$ and $41^{\circ}37'40''$ N. and long $71^{\circ}28'30''$ and $71^{\circ}37'55''$ W. It includes large parts of the towns of Exeter and South Kingstown and small parts of Charlestown, East Greenwich, North Kingstown, West Greenwich, and Richmond. The basin covers about 70 square miles as shown on figure 1.

The upper part of the Pawcatuck River is the principal stream in the basin. It is formed by two main tributaries, the Usquepaug River, the upper reaches of which are called the Queen River, and the Chipuxet River. The Queen-Usquepaug River drains the northern and western part of the basin; the Chipuxet River drains the eastern part. The Usquepaug flows through Great Swamp and the Chipuxet flows through Wordens Pond before they join in the southern part of the basin to form the Pawcatuck River (pl. 1).

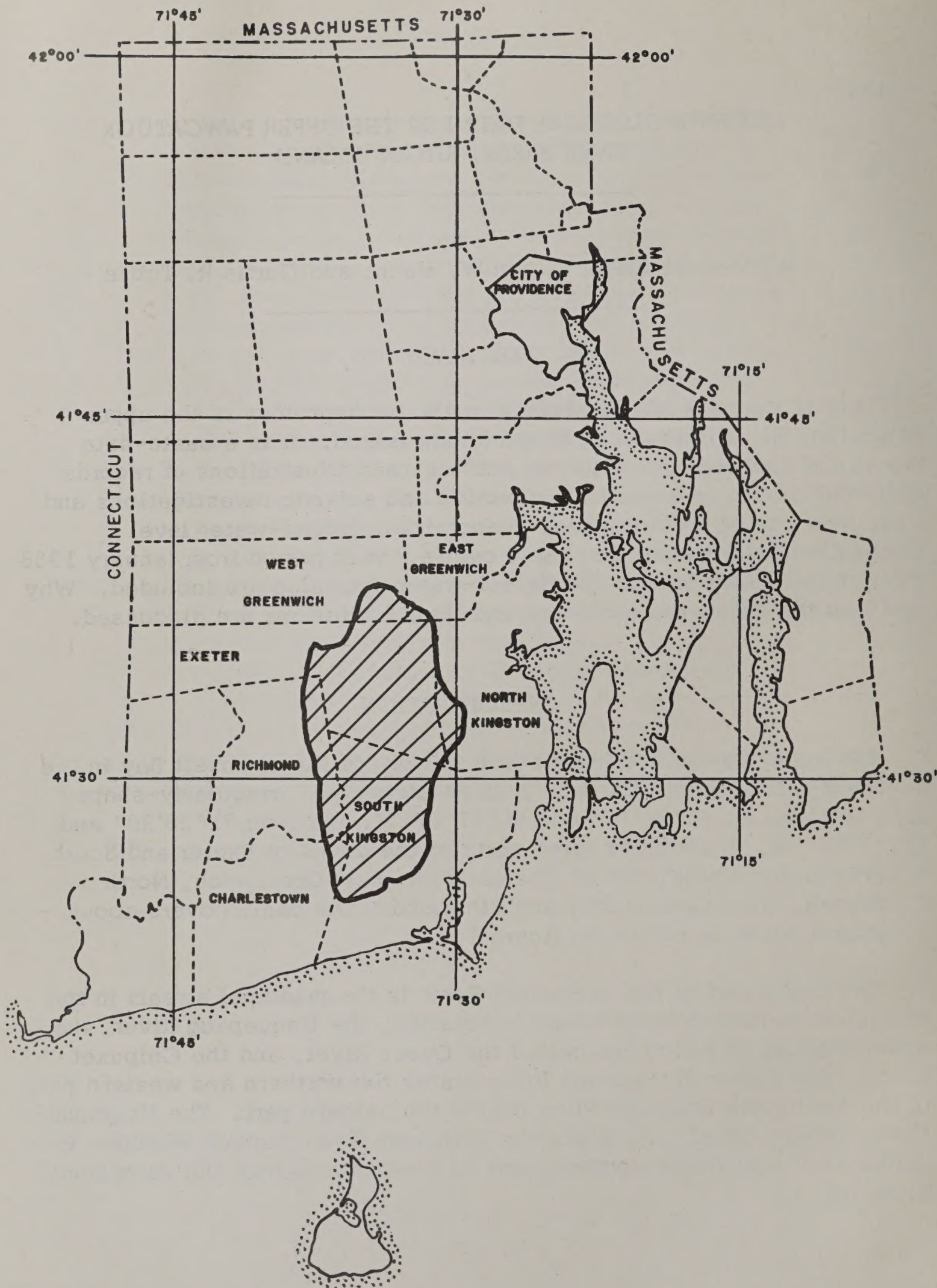


Figure 1.-- Index map of Rhode Island showing area described in this report.

The upper Pawcatuck River basin lies in the Seaboard Lowland section of the New England Physiographic Province (Fenneman, 1938, p. 370). It is an area of glacially rounded hills and flat-floored valleys. The northern half of the basin is characterized by low, rounded hills, generally less than 500 feet above sea level, and is underlain by crystalline rock with a discontinuous, thin cover of unconsolidated deposits. In contrast, the southern half of the basin is relatively flat and swampy and forms a plain at about 90 to 100 feet above sea level. Unconsolidated deposits, as much as 180 feet thick, underlie the plain and rest on or against crystalline rocks. Bounding the basin on the south is an east-west trending belt of low hills and ridges called the Charlestown moraine.

The geologic formations in this report are referred to as consolidated rocks and unconsolidated deposits. The consolidated rocks (bedrock) include a number of geologic formations which are here called crystalline rocks. They have been studied and named in detail by the U. S. Geological Survey. The unconsolidated deposits, mainly glacial drift of the Pleistocene series, consist of (1) glacial till (unsorted and unstratified deposits), (2) several types of fluvioglacial deposits here classed as glacial outwash (sorted and stratified deposits), and (3) mixtures of the glacial till and outwash. Thin and discontinuous material of the Recent series includes eolian, alluvial, and swamp deposits. As used in this report, the term "ground-water reservoir" refers to the unconsolidated deposits. They are mostly permeable, saturated, and in the valleys are in hydraulic connection with the streams. The underlying and adjoining consolidated rocks are relatively impermeable and locally supply only small quantities of water to wells. They generally form the boundary of the ground-water reservoir.

Purpose and Scope

The purpose of this report is to release to the public basic geologic and hydrologic data that will be useful in studying and planning water-resources developments in the future. This report also complements an interpretive report on the availability of ground water. The interpretive report by William B. Allen, Glenn W. Hahn, and Richard A. Brackley titled "Availability of ground water, upper Pawcatuck River basin, Rhode Island," will be published by the U. S. Geological Survey as a Water-Supply Paper.

Geologic and hydrologic data are recorded in tables 1 to 12 and fig. 2; plate 1 and figure 1 show where the data were collected. The text precedes the tables and explains what data are available and how they were collected. Table 12 at the end of the report summarizes the well and boring records.

The data described in this report was collected under the general administration of L. F. Blair, former Chief, Planning Division, Rhode Island Development Council; Walter J. Shea, present Chairman, Rhode Island Water Resources Coordinating Board; A. N. Sayre and P. E. LaMoreaux, former Chiefs, Ground Water Branch, U. S. Geological Survey; and under the supervision of J. E. Upson and G. C. Taylor, Jr. former District Geologists, U. S. Geological Survey.

History

The U. S. Geological Survey, currently in cooperation with the Rhode Island Water Resources Coordinating Board and previously with the Development Council, the Port and Industrial Development Commission, and the Industrial Commission, has carried on a continuing program of investigations of the ground-water resources of the State since 1944. The results of these investigations are presented in a series of geological bulletins describing the ground-water resources of the State by $7\frac{1}{2}$ -minute quadrangles. These are generally reconnaissance-type reports, based largely on inventories of well and boring data and geologic field studies of bedrock outcrops and glacial deposits. To make such data available in a more concise form, starting in 1959 most of the quadrangle studies were continued in a series of ground-water maps using the U. S. Geological Survey (1:24,000 scale) topographic maps as a base. The reports and maps resulting from the ground-water program are listed on the back cover of this report.

In 1954, the Rhode Island Development Council, and the U. S. Geological Survey, agreed to start quantitative investigations leading to estimates of the amount of ground water available in specific areas. The area chosen for the first investigation was the upper part of the Pawcatuck River basin because of planned industrial parks along the main line of the New York, New Haven, and Hartford Railroad and the need for water to supply the parks. Because no work had been done in this area as a part of the quadrangle investigations, it was necessary to collect the basic information and to prepare quadrangle reports. Thus, ground-water reports or maps summarizing these data were prepared and published on the Kingston quadrangle (Bierschenk, 1956), Wickford quadrangle (Johnson and Marks, 1959), and Slocum quadrangle (Hahn, 1959). (See references.) After July 1957, the State part in these cooperative investigations was carried on by the Water Resources Coordinating Board.

As a part of the quantitative investigations, review or appraisal was made of the general hydrology of all the ground-water reservoirs in the State to determine the over-all picture of the general movement of water into and out of these areas and the apparent relationships between ground water and surface water in each. This appraisal was made by Lang (1961) and serves as a guide for recommending quantitative studies in specific areas.

In addition to the appraisal of the ground-water reservoirs, Lang and others (1960) showed that the hydraulic characteristics of the water-bearing glacial outwash in several ground-water reservoirs of the State varies greatly from place to place and depends largely on local lithologic character and hydrologic environment. The characteristics were computed from well-performance tests made by well drillers.

The detailed investigation of the upper Pawcatuck River basin started in July 1957 and continued through June 1960. However, most of the data were collected for the period January 1958 through December 1959.

Acknowledgments

The authors are indebted to many well drillers who furnished logs and other valuable information. Residents, well owners, and town officials supplied useful data and permitted measurement of wells. R. L. Carlson, U. S. Weather Bureau, gave technical advise on measuring precipitation and pan evaporation and loaned several instruments.

Special thanks are due H. Houlihan and C. Koehler, American Drilling Co., East Providence, R. I.; and G. Hancock and other employees of R. E. Chapman Co., Oakdale, Mass. who were especially helpful in the test drilling and pumping-test phases of the investigation. Particle-size analyses were made by R. L. Fruggiero, Materials Testing Laboratory, Rhode Island Division of Roads and Bridges and water analyses were made by J. Deluty, Water Testing Laboratory, Rhode Island Division of Sanitary Engineering.

Well-Numbering and Location System

In Rhode Island, wells, borings, and springs are numbered consecutively within each city or town in the order in which they were inventoried. Wells in the town of Charlestown are indicated by "Cha," in East Greenwich by "Egr," in Exeter by "Exe," in North Kingstown by "Nok," in Richmond by "Ric," in South Kingstown by "Sok," and in West Greenwich by "Wgr". Because the town names and boundaries are on plate 1 the prefixes are omitted.

To facilitate finding the wells on plate 1, the latitude and longitude are given in table 12 and on the margins of plate 1.

GEOLOGICAL AND GEOPHYSICAL EXPLORATION

Geological and geophysical exploration by means of test drilling and seismic and resistivity studies was undertaken to define more accurately the type and thickness of the glacial deposits in the upper Pawcatuck River basin.

Test Drilling

Methods

Test drilling was by five methods; wash boring, coring, cable-tool (percussion) drilling, hand augering, jetting, and driving. The method was dictated by the type of geologic or hydrologic information.

Borings Cha 332-333, Exe 386-389 and 392-395, Nok 1166-1171 and 1231-1232, Ric 322-323, and Sok 869-882 and 889-898 (table 12) were primarily intended to collect lithologic information and physical properties of the unconsolidated deposits and were installed by the wash-boring method. Relatively undisturbed samples were collected by driving a split-spoon sample tube for about 2 feet of every 5 feet of material penetrated. Unsampled intervals were examined as cuttings during washing. The wash borings were generally of 2½-inch diameter. In very dense materials (till or mixed till and outwash) or deposits more than 150 feet thick, 4 - or even 6-inch casing was used initially and the smaller casing was telescoped within to lessen friction. Bedrock was cored only at selected sites, usually for 10 or 20 feet. Boulders encountered were generally less than five feet in diameter and in many places were easily cored and blasted.

Test wells Exe 400-402 and Sok 905-908, 8 inches in diameter, were constructed by the cable-tool method to determine the physical properties of the unconsolidated deposits and for use in pumping tests. Bailer samples were collected at five-foot intervals (table 12).

Hand-auger holes Exe 404-410 and Sok 1032-1035 (table 12), 12 inches in diameter, were dug to the zone of water-table fluctuation to collect samples for laboratory determination of specific yield.

Observation wells Exe 396-398 and Sok 900-903 (table 12), 2 inches in diameter, were jetted to show water-level fluctuations before, during, and after pumping tests. Materials penetrated were examined in the field as they washed up around the outsides of the casings.

Observation wells Exe 390, 391, 399; Ric 324; and Sok 868, 885, 886 (table 12) were driven at places where no existing wells were available. The ease or difficulty of hand driving provided an estimate of the density of material penetrated. Exe 399 was 2 inches in diameter; the other driven wells were $1\frac{1}{2}$ inches in diameter.

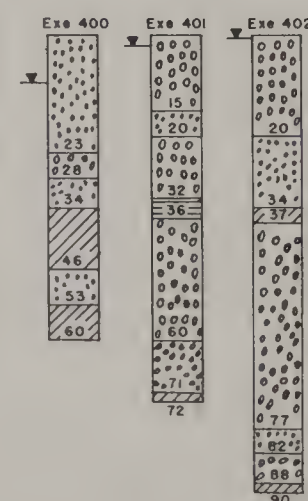
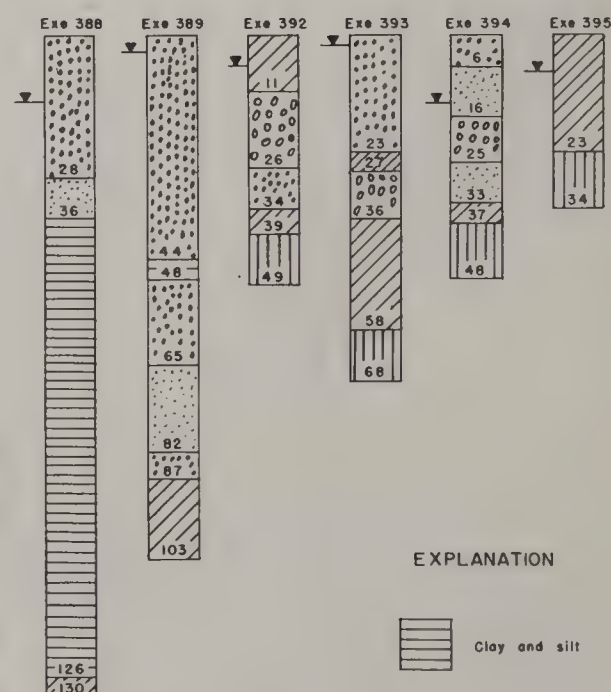
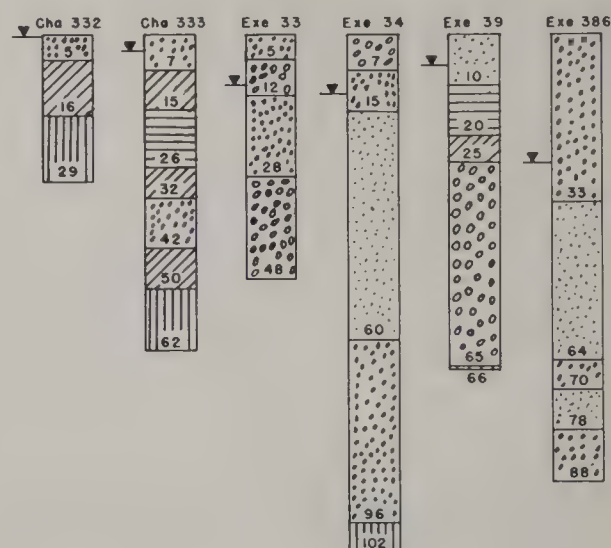
All samples were examined and described in the field, and many were re-examined in the office after drying. Selected samples were analyzed at the Water Resources Division Hydrologic Laboratory for particle-size distribution, porosity, specific yield, and permeability and some at the State Materials Testing Laboratory for grain size.

Tabulation of Data

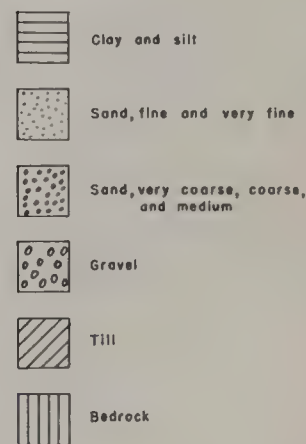
Table 1 presents the physical properties of samples and the logs from selected wash borings and cable-tool-drilled wells constructed during the test-drilling program. Other data for borings and wells not included in table 1 appear in table 12.

TABLE I.- PHYSICAL PROPERTIES OF UNCONSOLIDATED DEPOSITS AND LOGS OF WELLS IN THE UPPER PAWCATUCK RIVER BASIN

WELL NUMBER	SAMPLE DEPTH (feet)	PERCENTAGE OF SAMPLE BY WEIGHT								MEDIAN GRAIN SIZE (mm)	POROSITY (%)	SPECIFIC YIELD (%)	PERMEABILITY (gpd/sq ft)
		Clay and silt (<0.0625 mm)	SAND					Gravel >2 mm					
			Very fine .0625-.125 mm	Fine .125-.25 mm	Medium .25-.5 mm	Coarse .5-1 mm	Very coarse 1-2 mm						
Cha 332	15.2	27.6	6.9	9.7	11.5	19.2	15.6	9.5	0.36	--	--	--	
Cha 333	11.0	7	10	9	8	7	7	52	2.7	--	--	--	
	17.0	26	58	13	3	0	0	0	.075	--	--	--	
	22.0	94.6	4.6	.4	.2	.2	.0	.0	.017	--	--	2	
	26.7	12	13	18	17	11	6	23	.32	--	--	--	
	41.7	7.5	4.3	8.7	15.7	17.3	13.0	33.5	.88	--	--	17	
	45.8	11	5	10	13	16	14	31	.82	--	--	--	
Exe 33	12	6	5	5	5	9	16	54	2.3	--	--	--	
	22	2	2	7	23	30	18	18	.72	--	--	--	
	35	0	2	3	7	14	20	54	2.3	--	--	--	
	40	1	4	10	13	16	17	39	1.3	--	--	--	
Exe 34	7	4	3	3	9	13	14	54	2.4	--	--	--	
	11	1	12	14	14	21	19	19	.72	--	--	--	
	20	25	40	27	5	1	1	1	.10	--	--	--	
	40	12	32	13	43	0	0	0	.16	--	--	--	
	50	37	28	13	8	6	4	4	.079	--	--	--	
	70	5	20	15	54	3	1	2	.28	--	--	--	
Exe 39	84	4	2	2	6	16	27	43	1.6	--	--	--	
	5	6	7	42	14	23	6	2	.20	--	--	--	
	10	13	11	16	10	9	7	34	.51	--	--	--	
	15	43	11	8	7	9	9	13	.093	--	--	--	
Exe 386	25	27	8	5	4	2	4	50	2.1	--	--	--	
	45	2	4	8	10	11	13	52	2.2	--	--	--	
	41.5	22	21	29	14	8	3	3	.15	--	--	--	
	58.5	11	15	42	30	1	1	0	.20	--	--	--	
Exe 388	66.5	1	1	23	64	9	2	0	.30	--	--	--	
	76.0	7	6	28	22	13	4	20	.32	--	--	--	
	11.0	5	3	6	10	21	18	37	1.2	31.7	30.5	13	
	20.0	2	1	13	38	24	11	11	.46	--	--	--	
Exe 389	36.5	33	33	28	4	1	1	0	.093	--	--	--	
	46.5	50	42	8	0	0	0	0	.062	--	--	--	
	77.0	85	14	1	0	0	0	0	.035	--	--	--	
	96.5	93	5	1	1	0	0	0	.021	--	--	--	
	101.5	81	7	8	2	2	0	0	.018	--	--	--	
	117.0	83	11	4	1	1	0	0	.030	--	--	--	
	11.0	3	1	4	16	32	21	23	.86	29.3	28.6	190	
	35.0	4	2	14	49	25	5	1	.40	--	--	--	
Exe 392	65.0	1	2	8	25	41	13	10	.62	--	--	150	
	71.0	29	11	28	29	3	0	0	.17	--	--	--	
	86.0	3	3	13	35	32	12	2	.47	--	--	--	
	96.0	10	4	14	10	10	11	41	1.1	--	--	--	
Exe 393	8.0	7	3	6	9	11	11	53	2.3	24.8	16.4	--	
	15.0	2	4	7	13	19	10	45	1.3	--	--	1,170	
	28.5	4	10	16	17	11	8	34	.60	--	--	--	
	35.5	6	10	14	16	12	11	31	.62	--	--	--	
Exe 394	21.0	.8	1.0	2.7	9.1	33.4	20.0	33.0	1.1	--	--	--	
	33.0	.7	1.8	6.9	14.4	14.2	11.6	50.4	2.0	--	--	--	
	48.5	4.9	4.1	6.6	9.6	8.9	7.7	58.2	3.7	--	--	--	
Exe 395	7.5	4	33	47	9	7	0	0	.155	40.3	35.2	--	
	16.5	4	5	9	10	10	9	53	2.4	--	--	--	
	28.5	4	13	37	41	4	1	0	.24	--	--	--	
Exe 400	12.0	10.2	7.6	10.9	10.0	13.6	13.3	34.4	.90	50.0	25.7	11	
	9.7	1	2	10	23	17	14	33	.90	--	--	--	
	20.0	1	1	3	9	20	23	43	1.6	--	--	--	
	25.0	1	1	3	5	10	15	65	3.2	--	--	--	
	34.0	1	1	3	12	31	26	26	1.1	--	--	--	
	45.0	3	2	7	12	8	11	57	2.9	--	--	--	
Exe 401	50.0	0	2	5	11	16	25	41	1.5	--	--	--	
	60.0	4	5	8	10	7	12	54	2.3	--	--	--	
	5.8	0	1	3	7	10	12	67	4.0	--	--	1,200	
	20.0	1	1	3	11	36	20	28	.96	--	--	670	
	25.0	0	0	2	10	18	12	58	2.8	--	--	1,200	
	40.0	1	1	3	7	12	14	62	3.6	--	--	6,100	
Exe 402	55.0	1	1	4	11	20	18	45	1.6	--	--	1,100	
	66.0	0	1	3	8	16	16	56	2.6	--	--	1,700	
	5.0	3	2	5	14	24	16	36	1.1	--	--	7	
	23.0	4	4	11	18	16	13	34	.89	--	--	1,100	
	33.5	5	4	10	23	30	13	15	.59	--	--	1,100	
	41.0	0	1	4	16	24	13	54	2.4	--	--	110	
	50.5	0	0	2	6	15	13	64	4.7	--	--	4,500	
	60.0	1	1	4	14	20	13	47	1.7	--	--	900	
Exe 402	75.0	0	0	1	5	11	11	72	6.0	--	--	4,000	
	85.0	4	7	19	35	15	11	9	.39	--	--	640	
	90.0	0	0	2	5	12	10	71	10.0	--	--	--	
										--	--	--	



EXPLANATION



Water Table

Note: Figures within log diagrams denote depth, in feet, below land surface

Vertical scale in feet

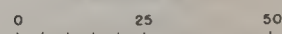
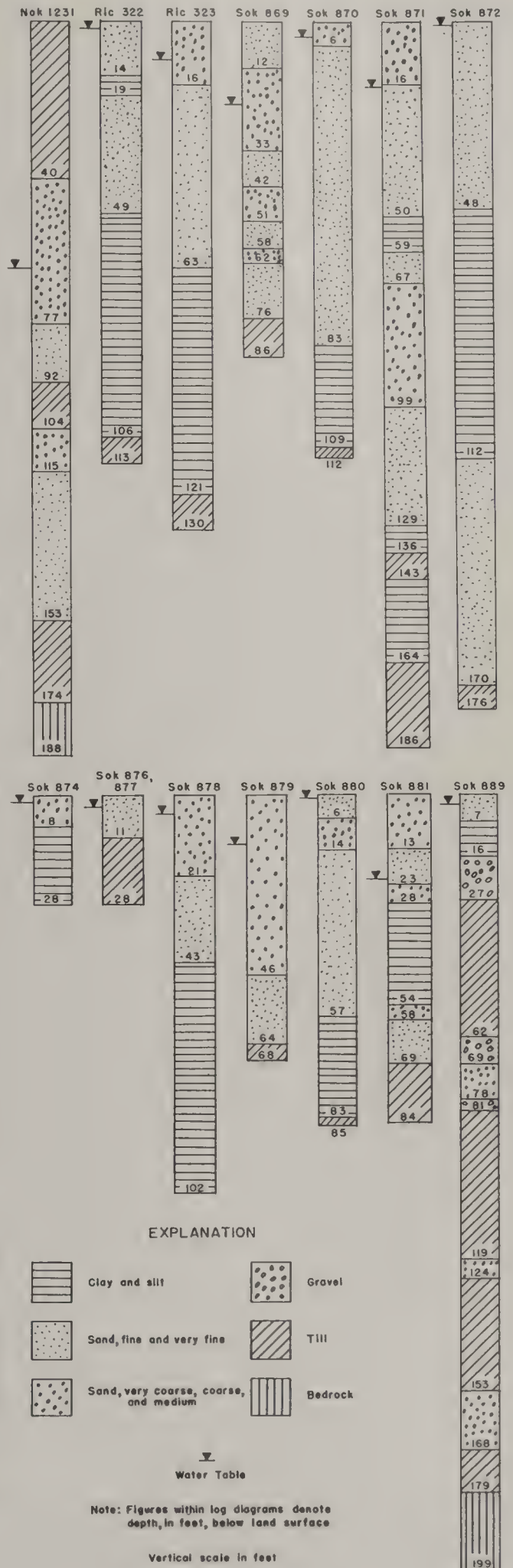


TABLE I.—PHYSICAL PROPERTIES OF UNCONSOLIDATED DEPOSITS AND LOGS OF WELLS IN THE UPPER PAWCATUCK RIVER BASIN—Continued

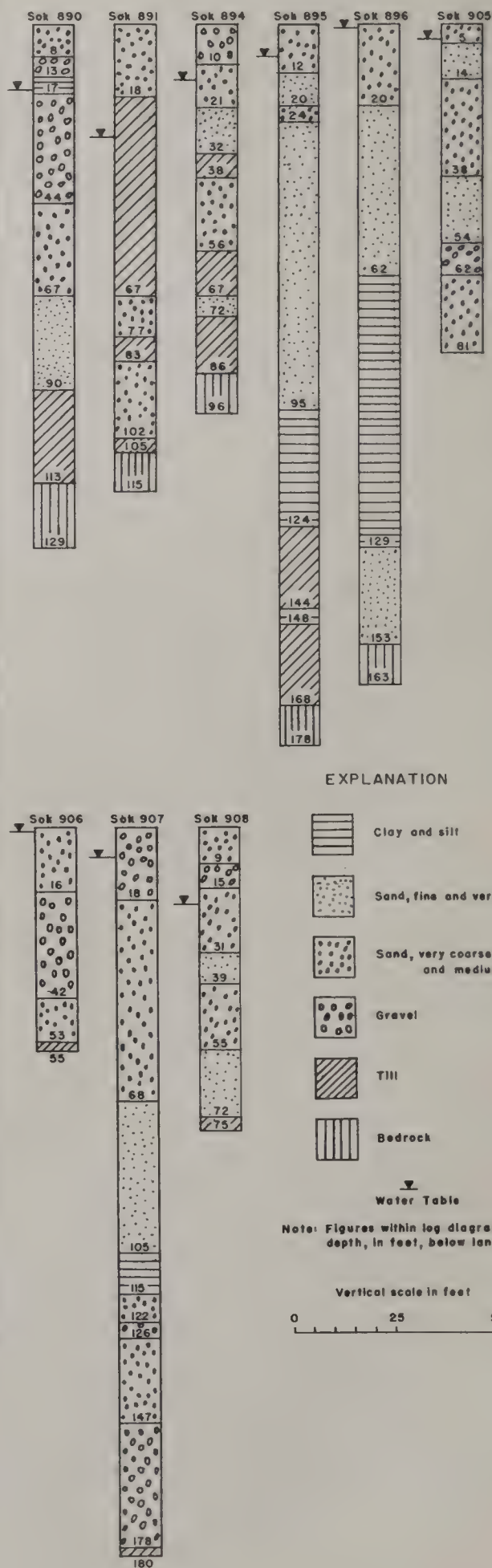
WELL NUMBER	SAMPLE DEPTH (feet)	PERCENTAGE OF SAMPLE BY WEIGHT								MEDIAN GRAIN SIZE (mm)	POROSITY (%)	SPECIFIC YIELD (%)	PERMEABILITY (gpd/sq ft)
		Clay and silt (0.0625 mm)	SAND					Gravel >2mm					
			Very fine .0625 - .125mm	Fine .125 - .25mm	Medium .25 - .5mm	Coarse .5 - 1mm	Very coarse 1 - 2mm						
Nok 1231	73.0	7.5	3.8	9.9	44.7	25.0	6.1	3.0	0.40	--	--	26	
	83.0	13.0	14.2	29.4	19.4	20.0	4.0	.0	.24	--	--	14	
	99.0	22.4	4.9	4.6	5.9	9.5	9.8	42.9	1.2	--	--	2	
	114.0	8.8	7.8	15.2	31.0	26.2	6.0	5.0	.38	--	--	16	
	122.5	15.8	25.6	27.8	21.8	7.4	1.6	.0	.16	--	--	6	
	132.0	23.6	33.2	33.4	8.6	.8	.4	.0	.11	--	--	9	
	160.3	20.4	6.4	11.2	16.5	12.0	11.8	21.7	.41	--	--	.7	
Ric 322	5.2	8	4	51	24	7	3	3	.21	36.9	32.8	--	
	11.0	40	52	7	1	0	0	0	.068	--	--	--	
	36.5	16	74	10	0	0	0	0	.077	--	--	30	
	56.5	68	28	4	0	0	0	0	.046	--	--	--	
	76.5	95	5	0	0	0	0	0	.015	--	--	--	
	101.5	98	2	0	0	0	0	0	.007	--	--	--	
	111.5	12	7	16	15	11	8	31	.50	--	--	1	
Ric 323	11.0	3	1	10	41	30	11	4	.47	36.2	32.8	--	
	19.0	9	15	50	23	3	0	0	.18	--	--	--	
	36.0	26	32	34	8	0	0	0	.11	--	--	--	
	56.0	29	24	25	15	4	1	2	.11	--	--	--	
	81.0	54	40	4	2	0	0	0	.056	--	--	3	
	106.0	77	5	6	3	3	4	2	.022	--	--	--	
	129.0	5	4	13	23	17	13	25	.60	--	--	--	
Sok 869	20.5	12	10	26	20	18	10	4	.27	41.4	38.5	--	
	26.0	7	9	23	34	15	9	3	.31	--	--	--	
	31.0	4	4	14	21	13	9	35	.71	--	--	--	
	41.0	10	33	46	7	3	1	0	.15	--	--	--	
	51.5	4	3	13	22	40	15	3	.58	--	--	50	
	56.5	12	22	41	18	4	2	1	.17	--	--	--	
	61.0	5	3	10	19	25	17	21	.70	--	--	20	
Sok 870	66.0	10	42	39	7	2	0	0	.12	--	--	--	
	85.0	10	6	15	15	14	13	27	.60	--	--	--	
	8.0	14	27	31	9	7	3	9	.15	33.1	27.4	--	
	16.0	28	35	32	4	1	0	0	.093	--	--	--	
	36.0	44	36	16	4	0	0	0	.066	--	--	--	
	51.5	42	47	10	1	0	0	0	.066	--	--	3	
	86.5	88	7	3	2	0	0	0	.027	--	--	--	
Sok 871	111.5	21	11	16	14	11	8	19	.28	--	--	--	
	17.0	10	20	52	17	1	0	0	.17	42.5	39.2	--	
	26.0	4	8	42	37	6	3	0	.24	--	--	--	
	41.5	17	29	46	8	0	0	0	.13	--	--	--	
	51.5	81	10	5	4	0	0	0	.024	--	--	--	
	66.5	5	14	53	27	1	0	0	.20	--	--	20	
	86.5	3	4	27	50	13	3	0	.31	--	--	40	
Sok 872	26.0	22	34	43	1	0	0	0	.12	--	--	--	
	56.0	84	16	0	0	0	0	0	.044	--	--	--	
	76.0	96	4	0	0	0	0	0	.011	--	--	.4	
	101.0	79	10	3	3	2	3	0	.008	--	--	.2	
	111.0	81	19	0	0	0	0	0	.027	--	--	--	
	131.0	33	48	19	0	0	0	0	.074	--	--	--	
	155.0	8	9	33	42	8	0	0	.25	--	--	--	
Sok 874	161.5	23	44	16	17	0	0	0	.087	--	--	--	
	175.5	17	6	14	11	10	8	34	.58	--	--	--	
	5.5	24	5	17	19	12	11	12	.30	39.5	36.1	--	
	16.0	64	32	4	0	0	0	0	.052	--	--	--	
	24.0	96	4	0	0	0	0	0	.011	--	--	--	
	26.0	79	10	6	4	1	0	0	.008	--	--	--	
	Sok 876-7	6.0	10	10	39	24	12	4	1	.21	27.1	25.4	--
12.0		14	6	17	15	15	8	25	.47	--	--	--	
Sok 878		4.0	2	1	7	18	28	21	23	.86	27.2	26.5	--
		11.0	2	1	8	27	24	15	23	.68	--	--	--
		40.5	4	19	65	11	1	0	0	.17	--	--	--
		101.8	74	16	6	2	1	1	0	.028	--	--	--
		Sok 879	26.5	14	9	20	22	14	9	12	.31	--	--
	41.5		2	3	13	31	30	19	2	.50	--	--	50
	61.0		25	32	35	6	1	1	0	.11	--	--	--
Sok 880	6.0		37	21	24	11	3	2	2	.092	42.2	36.1	--
	21.0		18	19	37	20	5	1	0	.16	--	--	--
	41.0		19	31	46	3	1	0	0	.12	--	--	--
	71.5		77	4	9	7	2	1	0	.014	--	--	--
	Sok 881	26.0	11	4	9	13	15	13	35	.90	--	--	--
		51.0	57	35	7	1	0	0	0	.050	--	--	--
		65.0	22	12	22	31	9	3	1	.21	--	--	--
80.0		12	5	11	11	11	11	39	1.0	--	--	--	
Sok 889		12.0	91.2	5.4	1.6	1.4	.2	.0	.0	.027	--	--	2
		21.5	4	6	7	10	11	9	53	2.6	--	--	--
		31.5	13	12	17	13	9	7	29	.38	--	--	--
	47.5	8	11	12	17	20	7	25	.53	--	--	--	
	64.0	1	2	2	4	4	9	78	7.1	--	--	--	
	74.7	8	9	3	11	34	11	24	.70	--	--	--	
	81.1	1.4	1.1	2.9	5.9	12.6	22.5	53.6	2.3	--	--	1,180	
Sok 889	137.5	13.4	4.7	7.9	17.8	17.0	11.1	28.1	.61	--	--	10	
	161.5	3.9	2.4	6.5	13.0	25.9	30.3	18.0	.96	--	--	60	
	173.4	24.7	12.4	15.6	11.8	14.9	8.7	11.9	.22	--	--	1	



(Percentages reported to the nearest tenth and values for porosity, specific yield, and permeability were determined in the Hydrologic Laboratory of the U. S. Geological Survey. Percentages reported as whole numbers were determined from curves based on particle-size analyses made by the Materials Testing Laboratory of the Rhode Island Division of Roads and Bridges.)

TABLE I.—PHYSICAL PROPERTIES OF UNCONSOLIDATED DEPOSITS AND LOGS OF WELLS IN THE UPPER PAWCATUCK RIVER BASIN—Continued

WELL NUMBER	SAMPLE DEPTH (feet)	PERCENTAGE OF SAMPLE BY WEIGHT								MEDIAN GRAIN SIZE (mm)	POROSITY (%)	SPECIFIC YIELD (%)	PERMEABILITY (gpd/sq ft)
		Clay and silt (<0.0625 mm)	SAND					Gravel 2 mm					
			Very fine .0625-.125 mm	Fine .125-.25 mm	Medium .25-.5 mm	Coarse .5-1 mm	Very coarse 1-2 mm						
Sok 890	15.0	50	43	5	1	1	0	0	0.062	38.7	16.3	—	
	43.5	4	4	6	9	10	11	56	2.8	—	—	—	
	51.5	4	6	18	34	20	9	9	.40	—	—	—	
	53.8	5	10	32	38	13	2	0	.26	—	—	—	
	62.0	1.7	8.4	23.7	29.4	20.4	7.8	8.6	.36	—	—	170	
	73.0	8	37	51	4	0	0	0	.13	—	—	—	
	99.0	8	8	11	15	16	8	34	.66	—	—	—	
Sok 891	45.5	8	4	18	25	11	6	28	.40	—	—	—	
	57.0	15.9	8.3	14.7	16.9	11.7	7.0	25.5	.40	—	—	3	
	67.0	9	12	16	7	10	10	36	.84	—	—	—	
	74.0	14.5	9.9	15.6	17.8	12.4	5.9	23.9	.36	—	—	4	
	83.0	8.6	5.1	8.9	15.3	16.3	10.9	34.9	.84	—	—	6	
	93.5	10.3	5.6	11.4	26.9	25.5	13.3	7.0	.46	—	—	14	
	98.0	8	6	12	12	22	13	27	.84	—	—	—	
Sok 894	13.0	1.4	1.0	3.8	17.4	26.7	21.4	28.3	1.0	30.6	26.9	370	
	28.0	18.9	39.6	37.1	3.0	.2	.4	.8	.11	—	—	41	
	33.0	7	7	11	11	10	7	47	1.5	—	—	—	
	52.0	0	2	6	17	65	6	4	.60	—	—	1,170	
	63.0	28.0	12.2	15.6	18.4	15.4	10.4	.0	.20	—	—	.5	
	82.7	6.9	3.5	6.9	10.9	13.7	15.9	42.2	1.4	—	—	9	
Sok 895	9.0	1.6	2.4	24.9	30.8	22.1	6.1	12.1	.40	34.3	31.0	362	
	20.0	10	41	40	8	1	0	0	.12	—	—	—	
	26.0	7	38	43	9	1	1	1	.13	—	—	90	
	47.0	12	29	41	14	4	0	0	.15	—	—	—	
	52.0	39.8	38.0	20.6	1.4	.2	.0	.0	.076	—	—	—	
	77.0	20	68	10	2	0	0	0	.075	—	—	—	
	93.5	11	21	65	3	0	0	0	.14	—	—	—	
	98.5	48	47	4	1	0	0	0	.065	—	—	—	
	121.5	88	11	1	0	0	0	0	.043	—	—	—	
	134.5	36	13	8	8	8	5	22	.13	—	—	—	
	148.5	60	31	5	2	1	1	0	.048	—	—	—	
	157.5	4	8	12	14	15	11	36	.86	—	—	—	
	168.5	9	9	13	14	10	8	37	.68	—	—	—	
Sok 896	5.0	6	5	13	25	18	9	24	.51	36.1	28.1	—	
	19.5	1.2	4.8	43.3	43.9	3.1	.4	3.3	.25	—	—	350	
	30.0	4	12	67	14	2	1	0	.17	—	—	—	
	52.0	28	68	3	0	0	1	0	.066	—	—	—	
	66.2	62.2	37.0	.4	.2	.2	0	0	.055	—	—	17	
	82.0	66	17	9	5	2	1	0	.032	—	—	—	
	102.6	91	7	2	0	0	0	0	.017	—	—	—	
	117.0	96.1	.4	2.0	1.2	.2	.0	.1	.006	—	—	2	
	141.2	32	42	20	3	2	1	0	.092	—	—	—	
	146.3	6	1	1	14	62	14	2	.62	—	—	—	
Sok 905	15.0	10	14	29	21	12	7	7	.23	—	—	20	
	20.0	0	2	5	16	28	23	26	1.0	—	—	1,000	
	30.0	4	6	12	21	21	17	19	.61	—	—	96	
	35.0	2	8	22	30	24	11	3	.37	—	—	190	
	45.0	5	17	60	16	2	0	0	.17	—	—	—	
	51.0	23	8	58	9	1	1	0	.18	—	—	—	
	55.0	2	2	2	6	18	12	58	12.0	—	—	—	
	70.0	2	4	8	17	21	13	35	.92	—	—	70	
	81.0	5	2	3	6	12	11	61	4.3	—	—	—	
Sok 906	7.0	9	8	12	16	15	9	31	.62	—	—	3	
	12.0	8	7	24	22	23	10	6	.36	—	—	86	
	21.0	0	2	4	8	14	15	57	2.8	—	—	2,000	
	30.0	1	1	2	3	6	11	76	18.0	—	—	1,500	
	45.0	4	5	12	16	14	11	38	.96	—	—	37	
	50.0	4	7	19	20	19	11	20	.50	—	—	310	
Sok 907	15.0	1	4	11	12	12	16	44	1.6	—	—	540	
	20.2	0	6	20	26	19	13	16	.46	—	—	170	
	25.0	6	9	19	22	15	9	20	.41	—	—	39	
	34.6	2	4	13	21	18	14	28	.70	—	—	180	
	45.0	1	1	4	10	16	17	51	2.0	—	—	1,040	
	59.0	0	6	26	45	5	8	10	.34	—	—	240	
	75.0	6	19	50	15	5	4	1	.19	—	—	—	
	107.5	84	14	2	0	0	0	0	.025	—	—	—	
	121.5	27	8	18	21	14	6	6	.23	—	—	—	
	125.0	1	1	1	1	2	5	89	12.0	—	—	10,000	
	130.0	0	0	6	24	35	19	16	.74	—	—	1,000	
	140.0	0	1	4	13	22	14	46	1.6	—	—	385	
	150.0	0	1	4	8	11	12	64	3.9	—	—	340	
	165.0	0	2	6	18	14	9	51	2.0	—	—	410	
	174.0	0	1	2	6	12	9	70	14.0	—	—	1,700	
Sok 908	23.7	1	4	12	40	21	9	13	.44	—	—	110	
	35.5	6	9	39	29	10	4	3	.24	—	—	—	
	45.0	4	6	14	13	14	23	26	.96	—	—	55	
	68.0	21	17	50	8	2	1	1	.14	—	—	36	



(Percentages reported to the nearest tenth and values for porosity, specific yield, and permeability were determined in the Hydrologic Laboratory of the U. S. Geological Survey. Percentages reported as whole numbers were determined from curves based on particle-size analyses made by the Materials Testing Laboratory of the Rhode Island Division of Roads and Bridges.)

Seismic Investigation

Twenty-three sites in the upper Pawcatuck River Basin were investigated by means of the refraction-seismic method during August 1958 and June 1959. Each site consisted of an alignment of several shot points. In August and September, 1961, the Geophysical Engineering Company of Abington, Pennsylvania, under the direction of George Castellucci made a refraction-seismic survey along a proposed South County Expressway. Part of this work was in the upper Pawcatuck River basin and selected data are included.

Preliminary analyses and interpretations of seismic-wave speeds and thicknesses of various layers for sites I to XXIII were made by the junior-junior author and are given in table 2. Comparable data for sites XXIV to XXVIII by G. Castellucci are also given.

Table 2. - Preliminary seismic data and altitude of bedrock surface

Site	Shot point	Altitude of land surface above mean sea level (feet)	Layer 1		Altitude of land surface above mean sea level (feet)	Layer 2		Depth to bedrock (feet)	Altitude of bedrock surface above or below (-) mean sea level (feet)
			Speed (kfs)	Thickness (feet)		Speed (kfs)	Thickness (feet)		
I	A	108	4.0	19	19	-	-	19	89
	B	96	5.0	46	46	-	-	46	50
	C	96	4.4	56	56	-	-	56	40
	D	102	3.5	52	52	-	-	52	50
	E	102	2.5	8	86	-	-	94	8
	F	99	3.1	19	70	5.8	51	70	29
	G	99	3.1	22	-	-	-	-	-
	H	95	4.2	42	-	-	-	-	-
	I	92	4.7	19	-	-	-	-	-
	J	92	5.3	38	-	-	-	-	-
	K	92	5.0	41	-	-	-	-	-
	L	92	4.5	51	-	-	-	-	-
	M	93	4.6	44	-	-	-	-	-
	N	95	3.4	15	150	6.2	106	150	-57
	O	92	3.8	26	129	5.3	114	129	-34
	P	92	5.2	108	124	5.1	98	124	-32
	Q	92	5.0	105	108	-	-	105	-16
	R	102	5.0	71	176	6.0	105	176	-74
	S	105	5.0	108	-	-	-	-	-
II	T	105	5.0	130	-	-	-	-	-
	R ₁	94	4.5	143	-	-	-	-	-
	S ₁	102	5.0	174	-	-	-	-	-
	A	109	4.3	109	174	-	-	174	-65
	B	110	4.3	107	107	-	-	107	3
	C	111	5.7	102	102	-	-	102	9
	D	113	4.9	113	113	-	-	113	0
	E	112	3.1	67	67	-	-	67	45
	F	118	4.7	113	113	-	-	113	5
	G	114	2.8	26	122	5.0	96	122	-8
	H	115	5.9	99	89	-	-	89	16
	I	111	2.3	17	-	6.1	83	-	-
	J	108	3.0	55	-	-	-	-	-
	K	110	2.9	16	104	4.9	88	104	6
	L	128	2.8	29	124	4.4	95	124	4
	M	128	2.3	53	125	8.5	72	125	3
	N	135	2.1	27	92	5.0	65	92	43
	O	139	2.5	74	74	-	-	74	-65
	P	132	2.2	56	56	-	-	56	76
	Q	108	4.0	59	59	-	-	59	49
III	R	88	4.8	30	30	-	-	30	58
	A _x	109	5.0	148	-	-	-	-	-
	A ₁	109	5.0	160	-	-	-	-	-
	A ₂	109	6.0	140	140	-	-	140	-31
	A ₃	112	5.0	108	108	-	-	108	4
	B ₁	95	5.2	139	139	-	-	139	-44
	B ₂	97	5.0	72	72	-	-	72	25
	A	108	7.0	58	58	-	-	58	50
	B	108	3.8	63	63	-	-	63	45
	C	114	4.0	103	103	-	-	103	11
	D	113	4.9	113	113	-	-	113	9
	E	112	3.1	67	67	-	-	67	45
	F	118	4.7	113	113	-	-	113	5
	G	114	2.8	26	122	5.0	96	122	-8
	H	115	5.9	99	89	-	-	89	16
	I	111	2.3	17	-	6.1	83	-	-
	J	108	3.0	55	-	-	-	-	-
	K	110	2.9	16	104	4.9	88	104	6
	L	128	2.8	29	124	4.4	95	124	4
	M	128	2.3	53	125	8.5	72	125	3
	N	135	2.1	27	92	5.0	65	92	43
	O	139	2.5	74	74	-	-	74	-65
IV	P	132	2.2	56	56	-	-	56	76
	Q	108	4.0	59	59	-	-	59	49
	R	88	4.8	30	30	-	-	30	58
	A _x	109	5.0	148	-	-	-	-	-
	A ₁	109	5.0	160	-	-	-	-	-
	A ₂	109	6.0	140	140	-	-	140	-31
	A ₃	112	5.0	108	108	-	-	108	4
	B ₁	95	5.2	139	139	-	-	139	-44
	B ₂	97	5.0	72	72	-	-	72	25
	A	108	7.0	58	58	-	-	58	50
	B	108	3.8	63	63	-	-	63	45
	C	114	4.0	103	103	-	-	103	11
	D	113	4.9	113	113	-	-	113	9
	E	112	3.1	67	67	-	-	67	45
	F	118	4.7	113	113	-	-	113	5
	G	114	2.8	26	122	5.0	96	122	-8
	H	115	5.9	99	89	-	-	89	16
	I	111	2.3	17	-	6.1	83	-	-
	J	108	3.0	55	-	-	-	-	-
	K	110	2.9	16	104	4.9	88	104	6
V	L	128	2.8	29	124	4.4	95	124	4
	M	128	2.3	53	125	8.5	72	125	3
	N	135	2.1	27	92	5.0	65	92	43
	O	139	2.5	74	74	-	-	74	-65
	P	132	2.2	56	56	-	-	56	76
	Q	108	4.0	59	59	-	-	59	49
	R	88	4.8	30	30	-	-	30	58
	A _x	109	5.0	148	-	-	-	-	-
	A ₁	109	5.0	160	-	-	-	-	-
	A ₂	109	6.0	140	140	-	-	140	-31
	A ₃	112	5.0	108	108	-	-	108	4
	B ₁	95	5.2	139	139	-	-	139	-44
	B ₂	97	5.0	72	72	-	-	72	25
	A	108	7.0	58	58	-	-	58	50
	B	108	3.8	63	63	-	-	63	45
	C	114	4.0	103	103	-	-	103	11
	D	113	4.9	113	113	-	-	113	9
	E	112	3.1	67	67	-	-	67	45
	F	118	4.7	113	113	-	-	113	5
	G	114	2.8	26	122	5.0	96	122	-8
VI	H	115	5.9	99	89	-	-	89	16
	I	111	2.3	17	-	6.1	83	-	-
	J	108	3.0	55	-	-	-	-	-
	K	110	2.9	16	104	4.9	88	104	6
	L	128	2.8	29	124	4.4	95	124	4
	M	128	2.3	53	125	8.5	72	125	3
	N	135	2.1	27	92	5.0	65	92	43
	O	139	2.5	74	74	-	-	74	-65
	P	132	2.2	56	56	-	-	56	76
	Q	108	4.0	59	59	-	-	59	49
	R	88	4.8	30	30	-	-	30	58
	A _x	109	5.0	148	-	-	-	-	-
	A ₁	109	5.0	160	-	-	-	-	-
	A ₂	109	6.0	140	140	-	-	140	-31
	A ₃	112	5.0	108	108	-	-	108	4
	B ₁	95	5.2	139	139	-	-	139	-44
	B ₂	97	5.0	72	72	-	-	72	25
	A	108	7.0	58	58	-	-	58	50
	B	108	3.8	63	63	-	-	63	45
	C	114	4.0	103	103	-	-	103	11

Table 2. - Preliminary seismic data and altitude of bedrock surface - Continued

Site	Shot point	Altitude of land surface above mean sea level (feet)	Layer 1		Altitude of bedrock surface above or below (-) mean sea level (feet)	Depth to bedrock (feet)	Layer 2		Altitude of bedrock surface above or below (-) mean sea level (feet)
			Speed (kfs) $\perp$ (feet)	Thickness (feet)			Speed (kfs) $\perp$ (feet)	Thickness (feet)	
VI	I	127	5.7	44	83	44	--	--	51
	J	128	3.2	24	104	24	--	65	47
	A	88	4.7	59	29	59	--	72	24
	B	110	4.4	40	70	40	--	95	35
	C	92	5.4	64	28	64	--	90	44
VIII	D	98	5.0	46	52	46	--	80	78
	A	95	3.6	28	67	28	--	60	--
	B	95	4.0	25	70	25	--	130	--
	C	95	6.4	18	77	18	--	79	44
	D	95	3.1	5	90	5	--	6.2	22
IX	A	125	3.4	20	105	20	--	6.6	13
	B	120	5.0	37	83	37	--	111	12
	C	125	6.2	60	65	60	--	141	-27
	D	125	3.5	16	49	16	--	120	--
	E	120	2.7	23	31	23	--	95	--
X	F	122	4.1	79	43	79	--	7	--
	G	120	4.5	43	77	43	--	2.6	--
	H	120	4.8	10	72	10	--	--	--
	I	118	4.3	35	-21	35	--	5.2	3
	J	122	5.2	52	-24	52	--	5.0	-12
	K	122	5.4	112	10	112	--	4.1	--
	L	118	3.6	16	4	16	--	--	--
	M	123	5.2	112	11	112	--	4.3	14
	N	124	4.2	39	-17	141	--	5.7	-18
	O	122	5.1	87	35	87	--	4.0	-3
	P	122	5.2	59	63	59	--	--	--
	Q	120	5.4	45	75	45	--	7.5	81
	R	115	5.4	5	110	5	--	60	72
	A	134	1.9	26	--	--	--	5.2	38
	XI	B	137	2.0	28	31	106	--	7.5
C		132	2.1	22	11	121	--	--	--
D		130	1.7	29	128	128	--	3.5	--
E		128	1.9	31	2	94	--	3.0	--
F		120	3.4	23	34	71	--	73	--
G		120	4.7	66	49	66	--	100	--
H		125	1.9	28	54	86	--	4.0	--
I		138	1.7	40	39	138	--	--	--
J		130	3.4	36	0	140	--	--	63
K		118	4.5	88	-10	88	--	--	--
L		122	4.6	95	30	95	--	--	98
M		132	2.6	28	27	105	--	--	112
N		136	3.1	18	8	128	--	--	107
O		135	4.5	60	29	103	--	--	106
XIV		P	132	3.5	22	59	76	--	--
	Q	135	2.3	26	82	83	--	--	76
	R	132	3.6	30	49	83	--	50	32
	S	132	2.9	24	52	--	--	60	45
	T	136	3.1	20	73	61	--	7.5	17
	U	134	1.7	17	69	61	--	--	26
	V	132	2.1	16	71	61	--	70	55
							--	--	59
							--	--	--
							--	--	--
							--	--	--
							--	--	--
							--	--	--
							--	--	--
							--	--	--

Table 2. - Preliminary seismic data and altitude of bedrock surface - Continued

Site	Shot point	Altitude of land surface above mean sea level (feet)	Layer 1		Depth to bedrock (feet)	Altitude of bedrock surface above or below (-) mean sea level (feet)
			Speed (kfs) 1/	Thickness (feet)		
XIV	G	110	3.5	41	41	69
	H	100	5.5	39	39	61
	I	110	2.2	49	49	61
	J	114	1.5	29	29	85
	K	114	4.0	34	34	80
XV	L	106	4.5	35	35	71
	A	139	3.0	32	32	107
	B	126	6.9	33	33	93
	C	124	5.1	43	43	81
	D	132	1.7	13	--	--
XVI	E	130	4.8	47	47	83
	F	134	4.4	44	44	90
	A	133	1.3	18	--	--
	B	125	1.2	11	46	79
	C	122	4.1	21	21	101
XVII	D	125	2.9	19	19	106
	E	135	2.3	23	90	45
	F	135	2.0	27	127	8
	G	128	1.1	10	97	31
	H	125	1.3	9	113	12
XVIII	A	155	4.0	20	55	55
	B	136	4.7	24	114	22
	C	130	5.7	22	108	--
	D	122	5.3	13	--	--
	E	121	5.0	19	100	21
XIX	F	129	3.8	8	98	31
	G	130	3.8	30	30	100
	H	137	6.3	29	29	108
	I	166	3.5	21	71	95
	J	180	6.0	59	59	121
XX	A	145	5.2	45	45	100
	B	150	2.0	22	--	--
	C	152	2.1	26	110	42
	D	155	4.3	30	108	47
	E	157	2.5	16	120	37
XXI	X	158	1.9	26	112	46
	X	153	1.9	15	107	48
	Z	155	2.4	26	--	--
	G	155	2.2	32	140	15
	Y ₁	155	1.9	37	127	28
XXII	Y ₂	154	2.2	25	115	39
	H	150	2.2	22	126	24
	I	140	4.8	12	98	42
	J	128	3.4	12	--	--
	A	145	1.8	22	22	123
XXIII	B	38	3.7	55	114	-76
	C	55	2.1	47	122	-67
	D	55	2.6	31	113	-58
	E	45	2.0	5	--	--
	E	25	1.7	19	--	--
XXIV	F	55	3.9	20	--	--
	G	55	3.2	32	125	-70
	H	58	3.3	24	86	-28
	I	68	5.0	98	98	-30
	J	68	2.3	28	115	-47
XXV	A	114	5.2	75	--	--

1/ Thousand feet per second.

2/ Seismic survey by Geophysical Engineering Co., Abington, Pa.

3/ Third layer, speed 5.0 kfs, thickness unknown.

4/ Third layer, speed 6.7 kfs, thickness 42 feet.

Resistivity Investigation

Geophysical exploration by means of the Lee partitioning method of electrical resistivity was attempted, unsuccessfully, at two sites. Electrical interference from grounded overhead telephone and electric wires and short circuiting from wire fences made site studies along roads nearly impossible. Studies off roads were equally difficult because of swamps and cultivated fields.

HYDROLOGICAL OBSERVATIONS

Hydrological observations of precipitation, evaporation, water-table fluctuation, and stream discharge were made to measure the water gains, water losses, and storage changes from the ground-water reservoir in the upper Pawcatuck River basin. These observations, together with pumping tests and chemical analyses of water samples, were also undertaken to define the hydrologic environment of the basin.

Precipitation

Three precipitation stations utilizing U. S. Weather Bureau standard 8-inch nonrecording gages were measured daily by paid observers. Records for these stations from 1957 through 1959 and for the U. S. Weather Bureau's cooperative station at Kingston for 1958-59 are given in table 3. Additional precipitation data for the basin are available for Kingston from 1889 to the present.

Station 2: Lafayette State Fish Hatchery (41°34'02", 71°30'24")
(Data collected by G. C. Gardiner for the U. S. Geological Survey)

Station 2: Lafayette State Fish Hatchery (41°34'02", 71°30'24")
(Data collected by G. C. Gardiner for the U. S. Geological Survey)

1957

	Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	-----	0.00	0.24	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.70
2	-----	0.00	.26	.00	1.54	.00	.08	.00	.00	.00	.00	.63	.00
3	-----	0.00	.00	.00	.01	.00	.07	.00	.00	.00	.00	1.07	.00
4	-----	0.00	.17	.00	.00	.00	.00	.00	.53	.00	.00	.02	.21
5	-----	0.00	.00	.00	.90	.00	.00	.01	.10	.00	.00	.01	.01
6	-----	0.00	.00	.00	1.37	.00	.00	.00	.00	.00	.00	.01	.00
7	-----	.03	.00	.00	.00	.00	.00	.13	.00	.00	1.00	.00	.11
8	-----	.05	.00	.24	.00	.00	.00	.00	.00	.29	.70	.00	.45
9	-----	.02	.00	.95	1.07	.00	.00	.28	.00	.00	.03	.96	.82
10	-----	.35	.57	.00	.00	.00	.00	.00	.00	.00	.00	.01	1.03
11	-----	.05	.00	.00	.00	.00	.00	.00	.43	.13	.00	.00	1.19
12	-----	.00	.00	.00	.00	.12	.00	.00	.00	.00	.00	.00	.45
13	-----	.02	.00	.03	.15	.00	.00	.00	.01	.00	.00	.00	.00
14	-----	.00	.00	.00	.00	.00	.00	.22	.00	.00	.00	.00	.00
15	-----	.00	.00	.00	.00	.93	.00	.00	.26	.03	.00	1.01	.00
16	-----	.16	.00	.49	.00	.00	.00	.00	.53	.00	.00	.00	.05
17	-----	.01	.00	.00	.00	.00	.00	.00	.00	.11	.00	.11	.00
18	-----	.00	.12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	-----	.00	.00	.00	.16	.02	.00	.00	.00	.00	1.13	.63	.00
20	-----	.00	.00	1.03	.00	.09	.00	.00	.00	.00	.08	.28	.01
21	-----	.00	.00	.41	.00	.10	.00	.00	.00	.01	.00	.00	1.02
22	-----	.00	.00	.00	.00	.32	.00	.00	.00	.00	.00	.18	.00
23	-----	1.21	.00	.00	.00	.00	.00	.14	.00	.22	.00	.00	.00
24	-----	.00	.00	.00	.00	.09	.00	.00	.00	.00	.02	.00	.00
25	-----	.00	.00	.00	.00	.00	.00	.00	.60	.00	.78	.00	.00
26	-----	.05	.00	.00	.19	.00	.00	.15	.72	.00	.00	.00	.00
27	-----	.00	.77	.00	.00	.00	.00	.22	.00	.00	.00	.00	1.04
28	-----	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00
29	-----	.13	.00	.00	.00	.00	.01	.00	.00	.00	.00	.16	.37
30	-----	.03	.00	.20	.00	.00	.00	.42	.03	.00	.00	.00	.00
31	-----	.00	.00	.00	.00	.00	.00	.40	.00	.00	.04	.00	.00
Total--	----	2.11	2.13	4.11	5.39	1.58	.25	1.97	3.21	.79	3.79	5.09	7.46
Annual--	----												

Station 1: Kingston (41°29'19", 71°32'20").
(Data from publications of U. S. Weather Bureau)

Station 1: Kingston (41°29'19", 71°32'20").
(Data from publications of U. S. Weather Bureau)

1958

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1-----	0.82	Tr.	0.00	0.15	0.00	0.00	0.00	0.68	0.00	1.10	0.00	Tr.
2-----	0.00	0.00	0.00	0.06	0.00	1.02	0.00	0.00	0.00	0.00	0.02	0.00
3-----	0.00	0.00	0.00	0.03	0.27	0.05	Tr.	0.00	0.00	0.00	0.36	0.00
4-----	0.00	0.00	0.99	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.91
5-----	0.00	0.00	0.00	0.00	0.07	0.00	0.57	0.00	0.31	0.00	0.00	0.09
6-----	0.00	0.00	0.00	0.76	0.27	0.00	1.30	0.00	0.00	0.00	0.00	Tr.
7-----	0.39	1.12	0.00	2.18	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-----	1.62	0.69	0.00	0.05	0.69	0.00	0.36	0.00	0.73	0.00	0.00	0.00
9-----	0.00	0.00	0.00	0.00	Tr.	Tr.	0.28	0.00	0.00	0.00	0.45	0.35
10-----	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.54	0.00	0.48	0.00
11-----	0.00	0.00	0.00	1.13	0.04	0.63	0.00	0.00	0.00	0.00	0.00	0.00
12-----	0.00	0.00	0.00	0.00	0.18	0.07	1.19	0.04	0.00	0.00	0.00	0.04
13-----	0.00	0.11	0.00	0.00	0.03	0.00	0.11	0.44	0.00	0.00	0.00	0.00
14-----	0.16	0.00	0.19	0.00	0.00	0.33	0.01	0.00	0.00	0.00	0.00	0.18
15-----	1.99	0.00	0.23	0.00	0.00	0.00	0.11	1.16	0.00	0.00	0.00	0.00
16-----	0.05	1.10	0.00	0.00	0.14	0.00	0.00	0.43	0.00	0.00	0.08	0.00
17-----	Tr.	0.02	0.00	0.00	0.00	0.00	0.00	0.41	0.39	0.00	Tr.	0.00
18-----	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.04	0.27	0.03	Tr.	0.00
19-----	Tr.	0.01	0.00	0.00	0.29	0.05	0.00	0.02	0.00	0.00	0.00	0.00
20-----	0.00	0.00	0.52	0.01	0.32	0.06	0.00	0.00	0.00	0.00	0.00	0.00
21-----	0.00	0.00	0.72	0.00	Tr.	0.05	0.00	0.02	0.00	0.00	0.00	0.00
22-----	1.16	0.04	0.03	0.16	0.00	0.13	Tr.	0.05	0.47	0.00	0.00	0.00
23-----	0.02	0.00	0.00	0.70	0.39	0.00	0.02	0.00	0.00	1.59	0.00	0.00
24-----	0.00	0.00	0.00	0.00	0.00	0.00	Tr.	0.00	0.00	0.10	Tr.	0.00
25-----	0.67	0.00	0.00	0.00	0.21	0.00	0.00	3.11	0.00	Tr.	0.00	0.00
26-----	0.68	0.00	0.24	0.00	0.89	0.00	0.00	0.87	0.00	0.79	0.13	0.00
27-----	0.05	0.03	0.04	0.00	0.01	0.05	0.83	1.15	1.00	0.09	0.00	0.00
28-----	1.12	1.25	0.00	1.55	0.01	0.00	0.00	0.66	1.96	0.04	0.00	0.00
29-----	0.06	0.00	0.29	0.24	0.16	0.00	0.61	0.78	0.03	1.48	0.00	0.00
30-----	0.00	0.00	0.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11
31-----	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total-----	7.79	3.37	4.25	7.73	4.44	2.81	4.29	7.18	5.71	3.77	3.00	1.48
Annual-----	55.82											

1959

[illegible]

Table 3.--Daily precipitation, in inches, at four stations in upper Pawcatuck River basin --Continued
Station 3: Glen Rock (41°30'56", 71°36'06")--Continued

Day	1958											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1-----	1.02	0.00	0.00	0.22	0.00	0.00	0.00	0.76	0.00	0.37	0.00	0.00
2-----	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	1.57	0.00	0.00
3-----	0.00	0.00	1.06	0.00	0.00	0.80	0.00	0.00	0.00	0.00	0.31	0.00
4-----	0.00	0.00	0.00	0.00	0.64	0.00	0.00	0.00	0.00	0.00	0.03	0.13
5-----	0.00	0.00	0.00	0.00	0.08	0.00	0.41	0.00	0.00	0.00	0.00	0.73
6-----	0.00	0.00	2.73	0.00	0.26	0.00	1.32	0.00	0.65	0.00	0.00	0.22
7-----	0.00	0.00	0.00	0.12	0.83	0.00	0.00	0.01	0.00	0.00	0.00	0.00
8-----	1.55	0.87	0.00	0.00	0.60	0.00	0.31	0.00	0.46	0.00	0.00	0.00
9-----	0.00	0.00	0.00	0.00	0.06	0.00	0.33	0.00	0.52	0.00	0.15	0.20
10-----	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.56	0.00
11-----	0.00	0.00	0.00	0.75	0.00	0.39	0.00	0.00	0.44	0.00	0.11	0.00
12-----	0.00	0.00	0.80	0.06	0.52	0.04	0.00	0.02	0.00	0.00	0.08	0.00
13-----	0.00	0.00	0.00	0.00	0.04	0.00	0.30	0.79	0.00	0.00	0.00	0.00
14-----	0.00	0.00	0.00	0.00	0.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
15-----	2.70	0.00	1.85	0.00	0.21	0.00	0.21	0.32	0.00	0.00	0.07	0.00
16-----	0.00	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.00	0.00	0.22	0.00
17-----	0.00	0.47	0.00	0.00	0.05	0.00	0.00	0.09	0.88	0.00	0.02	0.00
18-----	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62	0.24	0.00	0.03	0.00
19-----	0.00	0.00	0.00	0.00	0.23	0.16	0.00	0.00	0.00	0.00	0.12	0.00
20-----	0.00	0.00	0.00	0.00	0.12	0.04	0.00	0.00	0.00	0.00	0.02	0.00
21-----	0.00	0.00	1.47	0.00	0.00	0.14	0.00	0.08	0.47	0.00	0.00	0.00
22-----	0.00	0.00	0.00	0.90	0.00	0.31	0.00	0.00	0.00	1.55	0.02	0.00
23-----	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24-----	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.50	0.00	0.00	0.00	0.00
25-----	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.02	0.00
26-----	1.25	0.00	0.32	0.00	1.67	0.00	0.01	1.17	0.00	1.07	0.15	0.00
27-----	0.13	0.00	0.15	0.00	0.05	0.00	0.05	1.36	1.80	0.03	0.00	0.00
28-----	1.14	1.92	0.00	1.60	0.48	0.00	0.58	0.00	2.50	0.03	0.00	0.00
29-----	0.06	0.00	0.00	0.20	0.00	0.00	0.12	0.68	0.03	0.09	1.34	0.00
30-----	0.00	0.00	0.00	0.62	0.00	0.00	0.02	0.09	0.00	0.02	0.00	0.18
31-----	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.88
Total-----	7.76	3.26	5.15	8.06	5.65	2.87	5.12	8.42	6.37	5.29	2.83	1.88
Annual-----	62.66											

Station 3: Glen Rock (41°30'56", 71°36'06")
(Data collected by L. H. Whitford for the U. S. Geological Survey)

Day	1957											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1-----	0.00	0.15	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.66
2-----	0.00	0.22	0.00	1.52	0.00	0.05	0.00	0.00	0.00	0.00	0.37	0.00
3-----	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.03	0.00	1.27	0.00	0.00
4-----	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.70	0.01	0.00	0.02	0.00
5-----	0.00	0.00	0.00	1.22	0.00	0.01	0.00	0.11	0.00	0.00	0.00	0.27
6-----	0.00	0.01	0.00	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7-----	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.74	0.00	0.12	0.00
8-----	0.01	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.36	0.69	0.00	0.50
9-----	0.01	0.00	0.00	0.91	0.00	0.00	0.26	0.00	0.00	0.03	0.92	0.00
10-----	0.27	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.24
11-----	0.05	0.00	0.00	0.02	0.00	0.00	0.36	0.15	0.00	0.00	1.79	0.00
12-----	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.45	0.00
13-----	0.02	0.00	0.00	0.07	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.15
14-----	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.98	0.00
15-----	0.00	0.00	0.00	0.00	1.20	0.00	0.00	1.35	0.00	0.00	0.00	0.03
16-----	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.08	0.00	0.00	0.00
17-----	0.10	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.07	0.00
18-----	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19-----	0.00	0.00	0.00	0.23	0.00	0.20	0.00	0.00	1.08	0.74	0.00	0.00
20-----	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.05	0.35	0.00	0.00
21-----	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.06	0.00	1.27	0.00
22-----	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.19	0.00
23-----	1.13	0.00	0.00	0.00	0.00	0.48	0.00	0.37	0.00	0.00	0.00	0.00
24-----	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25-----	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.83	0.00	0.00
26-----	0.05	0.01	0.00	0.20	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00
27-----	0.06	0.78	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.73	0.00
28-----	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.36
29-----	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30-----	0.06	0.37	0.00	0.00	0.00	0.00	0.07	0.03	0.00	0.00	0.27	0.00
31-----	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total-----	2.51	2.09	--	5.08	1.82	.32	1.13	3.90	1.18	3.54	5.37	7.57
Annual-----	51.01											

Day	1959											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1-----	0.00	0.00	0.03	0.03	0.37	0.00	0.00	0.36	0.26	0.06	0.37	0.00
2-----	1.21	0.00	1.07	0.00	0.00	0.06	0.01	0.00	0.22	0.04	0.00	0.00
3-----	0.00	0.00	0.14	0.95	0.00	1.09	0.00	0.00	0.06	0.00	0.00	0.00
4-----	0.00	0.62	0.34	0.08	0.00	0.00	0.00	0.00	0.02	0.04	0.00	0.00
5-----	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.08	0.00
6-----	0.00	0.00	1.50	0.11	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00
7-----	0.00	0.00	0.35	0.09	0.00	0.22	0.17	0.00	0.00	0.33	1.40	0.00
8-----	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.33	0.35	0.00	0.00
9-----	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.00	1.35	0.00	0.00
10-----	0.00	1.20	0.04	0.19	0.00	0.00	0.02	0.08	0.00	0.02	0.00	0.00
11-----	0.00	0.28	0.00	0.52	0.00	0.00	2.37	0.00	0.00	0.00	0.00	0.00
12-----	0.00	0.12	0.29	0.05	0.00	0.00	0.30	0.00	0.00	0.25	0.00	0.88
13-----	0.01	0.14	0.71	0.17	0.01	0.82	0.07	0.00	0.00	0.00	0.00	1.46
14-----	0.00	0.00	0.00	0.00	0.56	1.46	0.27	0.00	0.00	0.35	0.05	0.04
15-----	0.00	0.57	0.00	0.00	0.00	0.08	1.07	0.00	0.00	0.00	0.07	0.00
16-----	0.22	0.00	0.25	0.00	0.00	0.00	0.07	0.00	0.93	0.00	0.00	0.00
17-----	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00
18-----	0.00	0.00	0.01	0.00	0.05	0.62	0.00	0.02	0.00	0.00	0.33	0.00
19-----	0.00	0.47	0.00	0.00	0.31	0.00	0.00	0.02	0.00	0.00	0.02	0.00
20-----	0.00	0.00	0.00	0.75	0.11	0.64	0.02	0.00	0.00	0.00	0.00	0.00
21-----	0.36	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.23
22-----	0.23	0.00	1.24	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.05	0.00
23-----	0.00	0.00	0.00	0.00	0.00	0.71	0.86	0.02	0.00	0.10	0.00	0.00
24-----	0.00	0.32	0.00	0.00	0.00	0.02	0.00	0.00	0.00	1.35	0.47	0.00
25-----	0.00	0.15	0.00	0.00	0.00	0.37	0.00	0.10	0.00	0.95	1.24	0.00
26-----	0.00	0.00	0.12	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.05	0.00
27-----	0.00	0.00	0.00	0.14	0.00	0.03	0.00	0.02	0.00	0.14	0.00	0.00
28-----	0.24	0.00	0.54	0.35	0.00	0.07	0.00	0.06	0.00	0.34	0.34	0.23
29-----	0.00	0.00	0.00	0.57	1.28	0.01	0.00	0.02	0.00	0.00	0.60	0.55

Table 3.--Daily precipitation, in inches, at four stations in upper Pawcatuck River basin --Continued

Station 4: Wordens Pond (41°25'41", 71°34'31")
(Data collected by G. A. Gardiner at Wakefield Water Co. well field before May 14, 1958;
by S. Tucker, Jr. at Wordens Pond, thereafter)

Day	1957											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1-----	0.00	0.00	1.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.00
2-----	0.00	0.49	0.22	1.13	0.00	0.00	0.00	0.00	0.03	0.00	1.36	0.00
3-----	0.00	0.00	0.00	1.01	0.00	0.01	0.00	0.00	0.01	0.00	0.16	0.06
4-----	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.35
5-----	0.00	0.00	0.00	0.65	0.00	0.00	0.00	1.00	0.00	0.00	0.01	0.00
6-----	0.00	0.00	0.00	1.51	0.00	0.00	0.00	0.00	0.00	0.76	0.00	0.10
7-----	0.52	0.00	0.00	0.04	0.00	0.00	0.00	0.00	1.29	0.64	0.00	0.71
8-----	0.03	0.00	0.09	0.00	0.00	0.00	0.04	0.00	0.00	0.07	0.35	0.43
9-----	0.00	0.00	0.72	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.99
10-----	0.01	0.44	0.02	0.01	0.00	0.00	0.38	0.00	0.31	0.00	0.00	1.42
11-----	0.40	0.00	0.00	0.00	0.19	0.00	0.00	0.76	0.00	0.00	0.00	0.41
12-----	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13-----	0.00	0.00	0.03	0.12	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
14-----	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.65	0.00
15-----	0.00	0.00	0.00	0.00	1.26	0.00	0.00	0.00	0.17	0.00	0.00	0.00
16-----	0.06	0.00	0.54	0.00	0.03	0.00	0.00	2.53	0.04	0.00	0.03	0.00
17-----	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00
18-----	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.64	0.52	0.00
19-----	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.06	0.25	0.00
20-----	0.00	0.00	0.63	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.86
21-----	0.00	0.00	0.90	0.00	0.56	0.00	0.00	0.00	0.50	0.00	0.11	0.00
22-----	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00
23-----	0.56	0.00	0.00	0.00	0.02	0.00	0.58	0.00	0.10	0.00	0.01	0.00
24-----	0.35	0.00	0.00	0.00	0.12	0.00	0.01	0.00	0.00	0.58	0.00	0.00
25-----	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.74
26-----	0.05	0.00	0.00	0.15	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00
27-----	0.00	0.47	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00
28-----	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.28	0.31
29-----	0.22	0.65	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
30-----	0.07	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.51	0.00
31-----	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total-----	2.40	1.78	5.19	4.69	2.23	0.02	1.40	6.19	2.52	2.79	4.61	6.38
Annual-----	40.20											

Station 4: Wordens Pond (41°25'41", 71°34'31")--Continued

Day	1959											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1-----	0.00	0.00	0.10	0.02	0.00	0.00	0.00	0.29	0.85	0.05	0.60	0.00
2-----	1.28	0.00	1.04	0.01	0.18	0.00	0.00	0.00	0.08	0.08	0.02	0.00
3-----	0.00	0.00	0.14	0.09	0.00	1.05	0.00	0.00	0.02	0.00	0.00	0.00
4-----	0.00	0.31	0.45	0.06	0.00	0.01	0.00	0.00	0.09	0.02	0.01	0.00
5-----	0.00	0.18	0.35	0.00	0.00	0.00	0.00	0.31	0.02	0.00	0.14	0.00
6-----	0.00	0.00	1.15	0.00	0.00	0.00	0.02	0.15	0.02	0.00	0.01	0.00
7-----	0.00	0.00	0.00	0.08	0.00	0.25	0.02	0.11	0.02	0.00	0.10	0.00
8-----	0.00	0.00	0.00	0.00	0.00	0.03	0.04	0.02	0.14	0.37	0.00	0.00
9-----	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.49	0.00	0.91	0.02	0.00
10-----	0.00	1.19	0.02	0.10	0.00	0.00	0.02	0.02	0.02	0.00	0.00	0.00
11-----	0.00	0.28	0.00	0.57	0.00	0.00	2.37	0.75	0.00	0.00	0.00	0.00
12-----	0.00	0.10	0.15	0.05	0.00	0.00	0.41	0.02	0.00	0.35	0.00	0.35
13-----	0.00	0.03	1.23	0.14	0.00	0.90	0.08	0.00	0.00	0.00	0.00	1.48
14-----	0.00	0.00	0.00	0.00	0.57	0.86	0.24	0.00	0.00	0.33	0.00	0.00
15-----	0.00	0.85	0.00	0.00	0.00	0.03	1.45	0.00	0.00	0.04	0.14	0.00
16-----	0.16	0.00	0.16	0.01	0.00	0.03	0.25	0.00	0.02	0.04	0.01	0.00
17-----	0.29	0.00	0.00	0.00	0.00	0.02	0.03	0.00	0.03	0.00	0.02	0.00
18-----	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.02	0.00	0.33	0.00
19-----	0.00	0.04	0.00	0.00	0.02	0.18	0.03	0.05	0.00	0.00	0.00	0.04
20-----	0.30	0.00	0.00	0.35	0.12	0.49	0.00	0.00	0.00	0.00	0.00	0.00
21-----	0.17	0.00	0.00	0.12	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.00
22-----	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.04	0.00	0.02	0.13	0.02
23-----	0.00	0.00	0.00	0.00	0.08	0.99	0.00	0.00	0.00	0.02	0.04	0.00
24-----	0.00	0.45	0.00	0.00	0.05	0.00	0.02	0.26	0.02	0.81	1.28	0.00
25-----	0.00	0.00	0.00	0.00	0.00	0.22	0.02	0.06	0.02	1.27	0.00	0.00
26-----	0.00	0.00	0.00	0.00	0.00	0.08	0.01	0.00	0.02	0.03	0.27	0.00
27-----	0.00	0.00	0.09	0.13	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00
28-----	0.13	0.00	0.28	0.00	0.15	0.00	0.05	0.05	0.02	0.59	0.16	0.25
29-----	0.00	0.00	0.00	0.50	0.08	0.03	0.00	0.04	0.02	0.00	0.60	0.00
30-----	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.00	0.00	0.00	0.00
31-----	0.00	0.00	0.63	0.00	0.00	0.00	0.00	0.24	0.00	0.06	0.14	0.00
Total-----	2.34	3.43	6.79	2.78	1.10	5.85	5.03	3.27	1.31	4.81	4.25	2.28
Annual-----	43.24											

Day	1958											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1-----	0.08	0.10	0.00	0.07	0.00	0.00	0.00	0.51	0.01	0.13	0.00	0.00
2-----	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.02	0.00	0.94	0.00	0.00
3-----	0.00	0.00	1.12	0.00	0.55	0.89	0.00	0.02	0.00	0.00	0.16	0.00
4-----	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.02	1.03
5-----	0.00	0.00	0.00	0.00	0.33	0.00	0.81	0.00	0.00	0.00	0.02	0.00
6-----	0.00	0.00	0.00	3.45	1.63	0.00	1.37	0.01	0.30	0.00	0.02	0.19
7-----	2.38	0.95	0.00	0.20	0.99	0.00	0.03	0.00	0.28	0.00	0.00	0.00
8-----	0.00	0.00	0.00	0.00	0.11	0.01	0.34	0.00	0.30	0.02	0.00	0.00
9-----	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.04	0.00	0.43	0.21
10-----	0.00	0.00	0.22	0.00	0.04	0.00	0.02	0.00	0.00	0.00	0.46	0.00
11-----	0.00	0.00	0.00	1.13	0.13	0.61	0.02	0.04	0.35	0.00	0.04	0.00
12-----	0.00	0.11	0.00	0.00	0.00	0.32	0.18	0.20	0.00	0.00	0.08	0.01
13-----	0.00	0.00	0.55	0.00	--	0.02	0.10	0.09	0.02	0.00	0.00	0.00
14-----	2.33	0.00	1.44	0.00	--	0.20	0.02	0.01	0.00	0.00	0.00	0.00
15-----	0.12	0.00	0.00	0.00	0.00	0.00	0.08	0.13	0.01	0.00	0.07	0.11
16-----	0.01	1.46	0.00	0.00	0.11	0.00	0.01	0.29	0.01	0.00	0.00	0.00
17-----	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.35	0.08	0.00	0.00	0.00
18-----	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.22	0.15	0.00	0.02	0.00
19-----	0.00	0.00	0.23	0.00	0.01	0.12	0.11	0.34	0.06	0.00	0.03	0.00
20-----	0.00	0.00	1.65	0.00	0.28	0.00	0.00	0.02	0.00	0.00	0.00	0.00
21-----	1.01	0.00	0.53	0.11	0.12	0.00	0.01	0.01	0.51	0.00	0.00	0.00
22-----	0.08	0.04	0.00	0.67	0.00	0.22	0.00	0.02	0.00	0.00	0.00	0.00
23-----	0.00	0.00	0.00	0.00	0.45	0.00	0.02	0.00	0.00	0.58	0.00	0.00
24-----	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00
25-----	1.24	0.00	0.17	0.00	0.00	0.02	0.02	1.54	0.01	0.00	0.00	0.00
26-----	0.08	0.00	0.39	0.00	0.77	0.00	0.00	1.55	0.00	0.63	0.00	0.00
27-----	0.13	1.24	0.00	0.11	0.00	0.07	0.66	0.46	0.02	0.09	0.00	0.00
28-----	0.13	0.07	0.00	1.65	0.02	0.01	0.02	0.09	2.06	0.00	0.18	0.00
29-----	0.00	0.00	0.00	0.68	0.12	0.00	0.55	0.23	0.00	0.14	1.03	0.02
30-----	0.00	0.00	0.50	0.00	0.00	0.00	0.03	0.02	0.00	0.00	0.00	0.12
31-----	0.00	0.00	0.52	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00
Total-----	7.59	3.97	7.10	8.37	--	2.75	4.59	6.18	4.21	2.66	2.56	1.69
Annual-----												

Evaporation

Three stations, utilizing evaporation pans constructed similar to the U. S. Weather Bureau class A 4-foot pans were located so as to measure evaporation under conditions of hilly, wooded terrain (station 2); swampy terrain (station 3); and terrain bordering a body of surface water (station 4). Station 1 is in the U. S. Weather Bureau's cooperative station at Kingston and measures evaporation from a flat, open terrain.

The water levels in the pans at stations 1, 2, and 4 were adjusted daily by adding or removing a measured amount of water. At station 3, an automatic water-stage recorder was installed so that only weekly visits were needed.

Daily evaporation readings for 1958-59 cover the months of April (May) through October for the four stations given in table 4. Additional data for Kingston is available from the U. S. Weather Bureau from 1957 to the present.

Table 4. ---Daily evaporation, in inches, at four stations in upper Pawcatuck River basin

Station 1: Kingston (41°29'19", 71°32'20")
(Data collected by R. C. Wakefield, Agricultural Experiment Station, University of Rhode Island)

1958								1959							
Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Day	May	June	July	Aug.	Sept.	Oct.	
1-----	--	0.19	0.24	0.22	0.17	0.13	0.07	1-----	0.01	0.21	0.16	0.08	0.11	0.15	
2-----	0.00	.12	.09	.30	.26	.23	.12	2-----	.19	.00	.13	.35	.08	.06	
3-----	.03	.16	.17	.19	.17	.14	.05	3-----	.22	.12	.19	.25	.04	.16	
4-----	.11	.02	.21	.26	.23	.21	.05	4-----	.20	.17	.26	.20	.08	.11	
5-----	.16	.03	.24	.00	.25	.11	.10	5-----	.15	.18	.14	.00	.19	.05	
6-----	--	.06	.21	--	.20	.01	.20	6-----	.19	.19	.25	.19	.15	.11	
7-----	--	.06	.28	.09	.17	.12	.08	7-----	.22	.17	.19	.15	.19	.15	
8-----	.06	.01	.14	.18	.33	.20	.02	8-----	.13	.20	.14	.17	.16	.12	
9-----	.03	.17	.03	.19	.10	.24	.08	9-----	.24	.35	.22	.10	.13	.07	
10-----	.20	.27	.03	.21	.30	.00	.07	10-----	.18	.19	.11	.07	.20	.10	
11-----	--	.07	.13	.14	.17	.09	.17	11-----	.26	.29	--	.11	.10	.05	
12-----	.02	.17	.12	.05	.18	.15	.12	12-----	.19	.06	.09	.38	.15	.12	
13-----	.11	.18	.16	.17	.18	.06	.08	13-----	.02	.09	.21	.20	.15	.10	
14-----	.21	.19	.27	.09	.11	.18	.15	14-----	.06	.11	.16	.13	.29	.00	
15-----	.18	.15	.31	.11	.17	.15	.07	15-----	.07	.41	.13	.19	.05	.01	
16-----	.10	.03	.30	.21	.08	.04	.09	16-----	.17	.06	.04	.22	.13	.20	
17-----	.09	.11	.21	.27	.09	.16	.11	17-----	.15	.06	.18	.22	.07	.07	
18-----	.12	.17	.18	.09	.10	.04	.17	18-----	.12	.05	.22	.05	.25	.15	
19-----	.19	.09	.00	.29	.24	.04	.11	19-----	.10	--	.05	.19	.07	.16	
20-----	.11	.03	.02	.32	.21	.06	.09	20-----	.07	.28	.14	.35	.05	.10	
21-----	.18	.15	.03	.19	.18	.03	.09	21-----	.17	.20	.13	.12	.20	.17	
22-----	.08	.29	.05	.12	.13	.05	.08	22-----	.16	.02	.23	.26	.05	.05	
23-----	.00	.24	.26	.05	.11	.14	.04	23-----	.23	.25	.07	.23	.09	.00	
24-----	.14	.25	.15	.13	.26	.11	.00	24-----	.23	.26	.10	.00	.10	--	
25-----	.17	.03	.18	.11	--	.14	.00	25-----	.28	.14	.13	.06	.09	.11	
26-----	.29	.08	.29	.08	.01	.15	.00	26-----	.28	.05	.30	.13	.22	.11	
27-----	.12	.15	.10	.24	.05	.13	.00	27-----	.12	.09	.23	.26	.22	.00	
28-----	.04	.07	.03	.08	.11	--	.02	28-----	.20	.03	.18	.21	.10	.06	
29-----	.00	.23	.35	.18	.06	.11	.01	29-----	.07	.12	.23	.13	.10	.07	
30-----	.02	.22	.35	.22	.12	.03	.11	30-----	.12	.26	.20	.02	.11	.05	
31-----	.20	.20	.13	.13	.18	--	.09	31-----	.26	--	.12	.21	.02	.02	

Station 2: Glen Rock (41°30'56", 71°35'06")
(Data collected by L. H. Whitford for the U. S. Geological Survey)

Day	1958					1959					Oct.			
	May	June	July	Aug.	Sept.	Oct.	Day	Apr.	May	June		July	Aug.	Sept.
1-----	--	0.19	0.22	0.06	0.16	0.23	1-----	--	0.05	0.29	--	0.10	0.21	0.11
2-----	--	.21	.24	.21	.14	.00	2-----	--	.11	.01	--	.27	.11	.08
3-----	--	.00	.24	.19	.24	.06	3-----	--	.13	.03	--	.19	.11	.11
4-----	--	.24	.08	.19	.16	.06	4-----	--	.26	.11	--	.18	.03	.08
5-----	--	.22	.17	.21	.05	.08	5-----	--	.19	.18	--	.07	.11	.11
6-----	--	.24	.10	.26	.09	.10	6-----	--	.19	.13	--	.07	.18	.05
7-----	--	.26	.03	.21	.03	.14	7-----	--	.19	.20	--	.14	.16	.16
8-----	--	.22	.13	.22	.12	.06	8-----	--	.14	.16	--	.11	.14	.01
9-----	--	.08	.07	.22	.22	.06	9-----	--	.21	.18	--	.22	.14	.02
10-----	--	.05	.21	.00	.16	.10	10-----	--	.22	.26	--	.05	.18	.07
11-----	--	.01	.19	.08	.00	.11	11-----	--	.14	.29	--	.08	.14	.08
12-----	--	.00	.07	.11	.15	.18	12-----	--	.14	.21	--	.14	.09	.06
13-----	--	.24	.11	.15	.13	.11	13-----	--	.22	.00	--	.21	.16	.13
14-----	0.21	.07	.11	.13	.14	.03	14-----	0.10	.03	.24	--	.18	.14	.03
15-----	.14	.46	.08	.14	.13	.06	15-----	.13	.16	.06	--	.21	.16	.05
16-----	.11	.21	.11	.14	.13	.06	16-----	.19	.11	.11	--	.16	.19	.03
17-----	.08	.27	.22	.04	.14	.13	17-----	.18	.19	.03	--	.19	.05	.10
18-----	.11	.10	.27	.06	.03	.10	18-----	.21	.10	.04	--	.18	.16	.05
19-----	.09	.17	.13	.14	.02	.10	19-----	.06	.16	.02	--	.16	.08	.11
20-----	.11	.03	.08	.18	.05	.10	20-----	.11	.03	.00	--	.19	.13	.08
21-----	.07	.04	.29	.19	.03	.08	21-----	.04	.18	.16	--	.23	.10	.11
22-----	.21	.03	.19	.14	.05	.06	22-----	.18	.14	.16	--	.20	.06	.10
23-----	.18	.16	.12	.14	.11	.06	23-----	.18	.17	.03	--	.18	.13	.15
24-----	.14	.14	.05	.19	.14	.11	24-----	.13	.24	.19	--	.20	.14	.13
25-----	.19	.19	.19	.12	.08	.08	25-----	.22	.16	.19	--	.00	.19	.09
26-----	.00	.22	.05	.00	.13	.05	26-----	.18	.24	.00	--	.18	.16	.08
27-----	.11	.08	.08	.13	.14	.05	27-----	.06	.18	.08	--	.18	.13	.06
28-----	.59	.21	.04	.11	.04	.03	28-----	.05	.18	.05	--	.16	.08	.02
29-----	.00	.18	.20	.04	.08	.01	29-----	.14	.24	.07	--	.20	.10	.06
30-----	.27	.24	.05	.07	.11	.05	30-----	.08	.13	.00	--	.15	.13	.05
31-----	.21	.16	.18	--	--	--	31-----	--	.18	--	--	.09	--	.05

Station 3: Wordens Pond (41°25'41", 71°34'31")
(Data collected by S. Tucker, Jr. for the U. S. Geological Survey)

Day	1958					Oct.	Sept.	1959					Aug.	Sept.	Oct.
	May	June	July	Aug.	Sept.			Day	Apr.	May	June	July			
1-----	--	0.18	0.19	0.97	0.20	0.03	1-----	--	0.19	0.35	0.29	0.10	0.11	0.11	
2-----	--	.19	.22	.15	.19	.00	2-----	--	.24	.16	.18	.22	.05	--	
3-----	--	.09	.16	.40	.22	.13	3-----	--	.06	.00	.06	.16	.08	.18	
4-----	--	.26	.30	.16	.00	.00	4-----	--	.19	.11	.13	.16	.06	.12	
5-----	--	.21	.14	.18	.16	.13	5-----	--	.26	.19	.22	.15	.15	.03	
6-----	--	.14	.15	.23	.46	.13	6-----	--	.26	.16	.24	.02	.15	.03	
7-----	--	.29	.09	.22	.28	.06	7-----	--	.16	.22	.02	.14	.15	.10	
8-----	--	.17	.18	.10	.20	.12	8-----	--	.16	.16	.30	.15	.15	.08	
9-----	--	.05	.06	.22	.04	.00	9-----	--	.38	.16	.16	.17	.06	.01	
10-----	--	.04	.21	.22	.26	.16	10-----	--	.16	.19	.15	.02	.15	--	
11-----	--	.11	.21	.20	.03	.16	11-----	--	.19	.29	.23	.05	.13	.00	
12-----	--	.06	.10	.14	.19	.13	12-----	--	.13	.16	.19	.15	.13	.09	
13-----	--	.24	.10	.07	.18	.06	13-----	--	.26	.03	.08	.10	.13	.06	
14-----	--	.14	.12	.06	.00	.00	14-----	0.00	.15	.03	.11	.19	.13	.14	
15-----	0.13	.53	.08	.13	.14	.13	15-----	.00	.06	.13	.11	.19	.13	.01	
16-----	.14	.27	.14	.23	.14	.00	16-----	.14	.10	.13	.12	.13	.00	.04	
17-----	.04	.11	.22	.22	.00	.13	17-----	.22	.19	.02	.00	.16	.13	.06	
18-----	.17	.19	.22	.16	.12	.10	18-----	.32	.19	.08	.10	.13	.15	.00	
19-----	.09	.01	.11	.28	.06	.22	19-----	.13	.15	.05	.13	.11	.00	.10	
20-----	.12	.00	.13	.12	.00	.00	20-----	.19	.12	.00	.06	.26	.13	.10	
21-----	.06	.00	.27	.19	.16	.13	21-----	.25	.00	.12	.15	.16	.13	.06	
22-----	.24	.64	.26	.15	.00	.06	22-----	.10	.13	.16	.10	.14	.00	.08	
23-----	.23	.24	.02	.10	.13	.00	23-----	.16	.18	.03	.10	.16	.10	.05	
24-----	.16	.22	.19	.26	.13	.10	24-----	.16	.31	.19	.12	.13	.12	.04	
25-----	.20	.16	.02	.13	.01	.00	25-----	.16	.19	.19	.15	.03	.12	.41	
26-----	.07	.16	.02	.00	.13	.00	26-----	.19	.16	.05	.17	.10	.12	.03	
27-----	.13	.07	.15	.01	.02	.06	27-----	.13	.22	.00	.10	.13	.10	.06	
28-----	.12	.25	.02	.04	.01	.00	28-----	.50	.19	.12	.16	.11	.12	.01	
29-----	.12	.35	.23	.00	.00	.00	29-----	.82	.18	.03	.13	.14	.15	.03	
30-----	.23	.27	.16	.02	.19	.00	30-----	.00	.16	.13	.16	.15	.00	.06	
31-----	.22	.12	.01	--	--	.00	31-----	.16	.22	.08	--	--	--	--	

Ground-Water Levels

Sixty-seven observation wells, selected generally for an areal coverage of about one well per square mile, were measured in the upper Pawcatuck River basin. Of these, 51 were existing wells that were not being used or had only limited use. The remaining 16 wells were constructed for or installed by the Geological Survey as described under test drilling. Automatic water-stage recorders, providing continuous records of water-level fluctuations, were installed on 6 wells. Water levels in 61 wells were measured generally biweekly by the wetted-tape method. Altitudes of most measuring points on observation wells were determined by third-order level lines from benchmarks; others were determined by an altimeter.

A summary of water-level data from all observation wells, indicating the period and availability of record, is given in table 5. Table 6 contains biweekly data from selected observation wells from January 1958 through December 1959.

Table 5. -- Summary of ground-water levels for observation wells in the upper Pawcatuck River basin
(Water levels are in feet below land-surface datum)

Publication media:

WSP is U.S. Geological Survey Water-Supply Papers

GB is Rhode Island Geological Bulletin No. 13 (this report)

HB is Rhode Island Hydrologic Bulletins

None - unpublished records available at U.S. Geological Survey office, Providence, R. I.

Well no.	Period of record	Frequency of measurement	Water level extremes				Range of water-level fluctuation	Publication media
			Highest	Date	Lowest	Date		
Cha 91	10-20-55/ 3- 5-58	Biweekly	7.63	4- 6-56	18.10	10-17-57	10.47	None
100	10-24-55/ 6-15-60	do.	10.74	4-17-58	27.45	11-29-57	16.71	GB
Exe 8	7- 9- /12- 8-46	Weekly	11.05	8-26-46	16.42	11-22-46	5.37	WSP
16	7- 9-46/ 5-17-56	do.	7.38	4-15-53	15.40	10-30-57	8.02	WSP
	5-31-56/ 6-22-60	Biweekly						HB
	7-29-60/Cont.	Monthly						GB
30	10-18-55/ 6-22-60	Biweekly	5.30	1-22-58	Dry	9-18/10-16-57	--	GB
43	10-18-55/ 6-22-60	do.	25.17	4-16-58	33.08	12-11-57	7.91	GB
63	10-20-55/ 6-22-60	do.	4.17	4-30-58	11.00	10-16-57	6.81	GB
86	10-18-55/ 6-22-60	do.	16.09	4-17-58	28.59	12-12-57	12.50	None
202	4- 6-56/ 6-23-60	do.	2.60	4- 6-56	Dry	10- 4/11- 4-57	--	GB
219	10-18-55/ 6-22-60	do.	3.20	4-30-58	Dry	9-18/10-16-57	--	GB
220	10-18-55/ 6-22-60	do.	10.20	10-18-55	20.80	9-18-57	10.60	GB
232	10-18-55/ 6-22-60	do.	7.63	5-14-58	Dry	12-12, 26-56, 10-30-57/ 1-22-58	--	GB
238	10-17-55/ 6-22-60	do.	9.37	10-17-55	13.43	10- 2-57	4.06	GB
248	10-18-55/ 6-22-60	do.	3.27	4-30-58	Dry	10- 2, 16-57	--	GB
262	11- 4-55/ 6-23-60	do.	9.31	4-30-58	12.27	10- 4-57	2.96	GB
263	10-20-55/ 6-23-60	do.	1.72	4-30-58	Dry	10- 4/11-14-57	--	GB
264	10-18-55/ 3-18-58	do.	7.98	4- 5-56	13.54	10- 2-57	5.56	None
267	8- 6- /11-26-54	Weekly	3.28	4-30-58	5.55	10- 2-57	2.27	WSP
	12-28-54/ 9-28-55	Monthly						GB
	10-18-55/ 6-22-60	Biweekly						

278	10-18-55/ 6-22-60	Biweekly	3.69	4-30-58	23.80	11-26-57	20.11	GB
281	10-18-55/ 6-22-60	do.	5.07	1-23-58	Dry	9- 5/11-26-57	--	GB
307	8-19- /11-26-54	Weekly	13.90	5-14-58	Dry	10-16/12-23-57	--	WSP
	12-28-54/ 2-27-57	Monthly						
	3-22-57/ 6-22-60	Biweekly						
310	8-20- /11-26-54	Weekly	5.68	10-27-55	10.13	10-16-57	4.45	WSP GB
	12-28-54/ 9-28-55	Monthly						
	10-18-55/ 6-22-60	Biweekly						
315	3-19-58/ 5-27-59	do.	.99	4-30-58	6.68	8-20-58	5.69	None
332	10-17-55/ 6-22-60	do.	8.04	4-16-58	22.08	10-30-57	14.04	GB
335	10-17-55/ 6-22-60	do.	2.27	10-17-55	Dry	8-22/11-14-56 6-27/12-11-57, 8-19/10-28-59	--	GB
347	1-20-55/ 1-29-57	Daily high & low	24.91	5-12-58	35.69	10-30-57	10.78	WSP
	2- 5- /12-23-57	Biweekly						
	12-24-57/ 5- 1-58	No record						
	5- 2-58/ 7- 5-60	Daily high & low						
390	4-30-58/ 6-22-60	Biweekly	2.27	4-30-58	5.68	9-30-59	3.41	None
391	4-30-58/ 6-22-60	do.	3.45	4-30-58	Dry	10-15-59	--	None
396	9- 8-59/ 7- 5-60	Weekly	2.41	4- 5-60	11.06	10-20-59	8.65	None
397	9- 8-59/ 7- 5-60	do.	.33	4- 5-60	2.40	10- 6-59	2.07	None
398	9- 8-59/ 7- 5-60	do.	23.91	9-29-59	25.88	11-24-59	1.97	None
399	2-23- / 7- 5-60	do.	.61	4- 5-60	2.82	6-28-60	2.21	None
Nok 675	8-11- /11-19-54	do.	22.85	4-19-56	28.95	12-11-57	6.10	GB WSP
	11-27-54/ 9-28-55	Monthly						
	10-18-55/ 6-22-60	Biweekly						
Ric 185	10-20-55/ 6-23-60	do.	14.66	5-15-58	Dry	9- 6/12-13-56, 8-21/11-29-57	--	GB
220	10-24-55/ 6-23-60	do.	4.15	4-16-58	9.95	10-31/11-14-57	5.80	GB
324	4-30-58/ 6-23-60	do.	1.69	3- 3-60	4.66	10- 1-59	2.97	None
Sok 6	11- 4- /12-19-47	Weekly	7.99	4-13-58	14.13	10-30/11- 3-57	6.14	GB,HB,WSP
	2- 7-55/ 7- 5-60	Daily high & low						
	7-29-60/ Cont.	Monthly						
10	12- 6-48/ 9-28-55	do.	2.44	4-29-58	14.82	11-14-57	12.38	GB,HB,WSP
	10-20-55/ 6-22-60	Biweekly						
	7-29-60/ Cont.	Monthly						

Table 5. -- Summary of ground-water levels for observation wells in the upper Pawcatuck River basin - Continued

Well no.	Period of record	Frequency of measurement	Water level extremes				Range of water-level fluctuation	Publication media
			Highest	Date	Lowest	Date		
83	1-10-49/12-14-51	Daily low	Water	level	affected	by	pumping	HB, WSP
	12-15-51/ 2- 4-52	No record						
	2- 5/ 5-12-52	Weekly						
	5-13/ 8- 6-52	No record						
	8- 7-52/ 2- 7-55	Daily low						
	2- 8- /10-20-55	No record						
	10-21-55/ 6-23-60	Biweekly						
303	7-29-60/ Cont.	Monthly	5.17	4- 6-56	8.95	10- 4, 17-57	3.78	WSP
	8-27 / 11-26-54	Weekly						
	12-28-54/ 9-28-55	Monthly						
	10-20- /12-29-55	Weekly						
	1-13-56/ 6-23-60	Biweekly						
452	2-24-56/ 6-23-60	do.	11.02	4-16-58	16.30	10-31-57	5.28	GB
481	10- 5-54/10-21-55	Monthly	10.09	2-24-56	13.93	7-27-55	3.84	WSP
	10-27-55/ 4-20-56	Biweekly						
509	5- 8- / 8-15-56	Daily high & low	11.06	5-15-58	16.49	10-31-57	5.43	GB
	10- 4-57/ 6-23-60	Biweekly						
510	10-20-55/ 9-19-57	do.	4.15	4- 6-56	Dry	6-12/ 9-19-57	--	None
515	3-29- / 4-27-55	Monthly	24.40	4-18-58	30.10	10-18/20-57	5.70	WSP, HB
	5-10-55/ 7- 5-60	Daily high & low						
	7-29-60 Cont.	Monthly						
530	4-20-56/ 6-23-60	Biweekly	6.61	4-16-58	12.03	10-31-57	5.42	GB
582	10-20-55/ 6-23-60	do.	5.60	4-29-58	13.12	10- 2-57	7.52	GB
605	11-30-54/ 9-28-55	Monthly	8.22	1-21-59	14.55	12-12-57	6.33	WSP
	10-20-55/ 6-23-60	Biweekly						
615	10-18-55/ 6-22-60	do.	5.20	4-16-58	13.47	10-30-57	8.27	GB
632	10-20-55/ 6-23-60	do.	7.17	4-15-58	10.93	11-26-57	3.76	GB

639	10-21-55/ 6-23-60	do.	15.90	4-17-58	Dry	9- 6/12-12-56, 7-12/12-12-57, 9-17/11-27-59	--	GB
682	10-21-55/ 3- 5-58	do.	5.26	1-22-58	14.83	10- 4,17-57	9.57	None
686	10-21-55/ 6-23-60	do.	9.95	2-10-56	Dry	10- 4/11-29-57	--	GB
749	9-28-55/ 1-31-56	Monthly	11.21	4-17-58	15.26	10-31-57	4.05	HB
	2-10- / 4-20-56	Biweekly						GB
	5- 8-56/ 1-29-57	Daily high & low						
	2- 5-57/ 6-23-60	Biweekly						
	7-29-60/ Cont.	Monthly						
865	10-18- /12-28-56	Weekly	.21	1-22-57	2.55	8-15-57	2.34	None
	1- 4- / 2-19-57	Intermittent record						
	2-26-57/ 1- 4-59	Daily high & low						
	1- 5- / 4- 6-59	No record						
	4- 7-59/ 7- 5-60	Daily high & low						
867	11- 2-56/ 6-23-60	Biweekly	2.69	5-14, 6-25-59	8.24	2-18-59	5.55	None
868	12-11-57/ 6-23-60	do.	.50	4-29-58	2.32	9-30-59	1.82	GB
883	4-30- /12-10-58	Daily high & low	.17	12- 5-58	1.36	9-28/10- 1-59	1.19	None
	12-11-58/ 4-13-59	No record						
	4-14-59/ 1- 9-60	Daily high & low						
	1-10- / 2-18-60	No record						
	2-19- / -29-60	Daily high & low						
	3- 1- / -30-60	No record						
	3-31- / 7- 5-60	Daily high & low						
885	4-30-58/ 6-23-60	Biweekly	.32	4-30-58	4.60	11-13-59	4.28	None
886	5-29-58/ 6-23-60	do.	2.03	3- 6-59	5.42	10-15-59	3.39	None
900	9- 8-59/ 7- 5-60	Weekly	2.47	4- 5-60	6.05	10- 6-59	3.58	None
901	9- 8-59/ 7- 5-60	do.	1.19	4- 5-60	4.98	10- 6-59	3.79	None
902	9- 8-59/ 2-23-60	do.	6.43	2-23-60	7.49	12-14-59	1.06	None
903	9- 8-59/ 7- 5-60	do.	17.17	4-12-60	20.31	11-24-59	3.14	None
Wgr 204	10-17-55/ 6-22-60	Biweekly	2.39	10-17-55	5.75	10- 2-57	3.36	GB
206	10-17-55/ 6-22-60	do.	2.85	10-17-55	9.34	10- 2-57	6.49	GB
213	10-17-55/ 6-22-60	do.	4.42	4-16-58	13.90	10- 2,16-57	9.48	GB

Table 6.-- Water levels in selected observation
(Water-levels are in feet)

	Cha 100	Exe 16	Exe 30	Exe 43	Exe 63	Exe 202	Exe 219	Exe 220	Exe 232	Exe 238	Exe 248	Exe 262	Exe 263	Exe 267	Exe 278	Exe 281	Exe 310	Exe 332
1958																		
Jan. 8, 9	25.14	13.37	5.96	32.53	6.31	4.48	4.57	14.74	(1)	11.58	7.52	9.82	5.82	3.86	² 18.40	6.29	6.87	12.75
22, 23	23.46	12.26	5.30	30.08	5.35	3.84	3.58	12.90	(1)	11.10	4.70	9.46	2.74	3.64	11.35	5.07	6.08	12.26
Feb. 4, 5	20.60	10.74	5.85	28.64	5.35	3.49	4.40	13.85	24.12	11.25	4.14	10.05	3.30	4.00	7.18	5.62	6.37	11.37
19, 20	18.54	10.00	6.02	28.94	6.18	3.72	5.45	² 13.87	17.47	11.82	5.10	² 9.86	² 3.07	4.28	8.76	6.76	6.94	12.78
Mar. 5, 6	18.10	9.27	5.82	28.39	5.43	3.42	4.22	14.34	16.27	10.95	4.07	9.63	2.96	3.77	6.62	5.86	6.51	12.51
18, 19	15.86	8.88	5.81	28.36	5.34	3.56	4.22	14.29	14.08	11.23	4.00	9.86	3.06	3.89	5.20	5.76	6.55	12.03
Apr. 2, 3	12.65	8.30	5.60	26.97	4.81	3.25	3.62	13.57	10.26	10.91	3.59	9.78	2.16	3.75	4.32	5.26	6.06	8.76
16, 17	10.74	7.92	5.57	25.17	4.53	3.05	3.61	12.83	8.01	10.79	3.40	9.63	2.14	3.59	4.36	5.24	5.89	8.04
29, 30	12.58	7.87	5.34	25.77	4.17	3.20	3.20	14.04	8.59	10.54	3.27	9.31	1.72	3.28	3.69	5.48	5.82	9.71
May 14, 15	12.04	7.94	5.83	25.67	5.09	3.38	4.21	13.61	7.63	11.10	3.75	9.90	3.50	3.74	5.22	5.83	6.14	9.76
28, 29	14.39	7.69	6.02	26.08	5.42	3.56	4.45	14.55	8.61	11.02	4.07	9.77	4.54	3.98	5.52	6.21	6.39	10.97
June 11, 12	16.53	8.34	6.36	26.64	6.21	3.80	5.35	14.62	9.29	11.70	5.00	10.13	6.50	4.18	8.02	6.93	6.80	11.74
25, 26	18.99	8.68	6.82	28.09	6.76	4.01	5.91	15.81	10.47	11.98	6.03	10.49	8.09	4.58	9.54	7.90	7.23	13.08
July 9, 10	21.50	9.19	6.93	28.03	7.13	4.15	6.01	16.34	12.10	11.93	6.96	10.43	10.27	4.43	11.20	8.98	7.50	13.89
23, 24	23.66	10.18	7.77	28.78	7.76	4.44	6.89	16.96	14.05	12.29	8.07	10.72	11.47	4.93	11.92	10.21	8.00	14.56
Aug. 6, 7	24.49	10.13	9.95	29.85	8.12	4.71	6.83	17.62	16.22	12.17	8.87	10.75	11.94	4.96	13.06	11.04	8.22	14.89
20, 21	24.89	10.38	8.05	29.74	8.50	4.89	6.90	18.27	17.84	12.15	9.67	10.66	12.36	5.00	14.12	11.92	8.35	15.35
Sept. 3, 4	25.09	10.32	7.95	30.06	8.13	4.73	6.27	19.51	19.22	11.93	9.26	10.52	9.93	4.72	14.50	11.16	8.34	14.46
17, 18	25.13	10.72	8.25	30.44	8.42	4.78	6.75	18.00	19.92	12.17	9.76	10.45	10.49	4.76	14.51	11.85	8.48	14.65
Oct. 1, 2	25.24	10.47	7.26	30.68	7.40	4.27	5.72	17.63	20.47	11.40	9.09	9.70	9.51	4.06	14.45	10.55	7.88	14.64
15, 16	24.75	10.62	7.71	30.29	7.66	4.53	6.09	16.40	19.55	11.95	8.43	10.40	8.59	4.76	12.66	9.53	7.86	13.55
29, 30	24.75	10.32	6.60	31.46	7.00	4.29	5.11	16.12	18.93	11.18	7.68	9.86	7.73	4.11	12.53	8.30	7.24	14.06
Nov. 12, 13	24.46	10.22	6.88	29.70	7.12	4.33	5.60	15.95	18.20	11.66	7.13	10.15	7.85	4.23	11.48	7.65	7.49	13.34
26, 28	24.23	10.10	7.66	29.52	7.48	4.43	6.12	16.20	17.44	12.00	7.28	10.40	9.02	4.60	11.64	8.20	7.67	13.76
Dec. 10, 11	24.16	9.98	7.21	29.44	7.07	4.28	5.67	15.90	18.28	11.73	7.01	10.26	8.16	4.37	10.99	7.49	7.49	13.64
22, 24	24.04	10.05	7.56	29.23	7.54	4.36	6.15	16.28	18.42	11.98	7.41	10.40	9.12	4.60	11.50	8.06	7.40	14.09
1959																		
Jan. 7, 8	24.25	10.72	7.60	29.35	7.45	4.35	5.87	16.48	18.88	11.90	7.69	10.35	9.11	4.47	11.65	8.30	² 7.53	14.08
21, 22	24.32	11.10	7.98	29.44	7.75	4.17	6.27	16.89	19.50	12.02	8.01	10.22	9.81	4.56	12.28	9.08	7.59	14.51
Feb. 4, 5	24.56	11.25	8.00	29.56	7.78	4.25	5.99	17.01	19.99	12.04	8.02	10.25	9.82	4.33	12.34	8.77	6.90	14.60
18, 19	24.64	11.04	7.50	29.11	7.23	4.01	5.82	16.09	20.32	11.63	7.41	10.00	8.67	4.26	11.59	7.70	6.95	14.39
Mar. 4, 5	24.36	11.15	7.00	29.15	7.02	3.92	5.44	16.13	20.57	11.44	6.99	9.85	8.45	3.94	11.63	7.12	6.88	14.46
18, 19	23.53	10.35	6.22	28.36	5.96	3.79	4.53	14.40	19.00	11.05	5.19	9.69	4.15	3.84	8.02	5.75	² 6.40	12.74
Apr. 1, 2	19.97	10.00	6.13	27.87	5.44	3.60	4.33	14.40	14.35	11.03	4.29	9.77	3.38	3.79	6.39	5.52	6.22	11.69
15, 16	17.91	9.44	6.60	27.40	5.63	3.53	4.62	14.34	11.06	11.29	4.51	9.97	4.16	3.94	6.66	5.88	6.18	10.88
29, 30	18.93	9.36	7.00	27.70	6.03	3.59	4.97	15.28	11.53	11.53	4.97	10.03	5.41	3.92	7.74	6.29	6.33	12.00
May 13, 14	20.20	9.60	7.74	28.05	6.55	3.80	5.88	15.64	12.71	11.97	5.99	10.28	7.15	4.42	9.23	7.18	7.02	12.85
27, 28	22.05	10.35	8.16	28.41	6.92	4.09	6.29	16.07	14.46	12.14	6.86	10.59	8.36	4.60	10.76	8.07	7.48	13.87
June 20, 11	23.96	10.78	8.43	30.00	6.93	4.31	6.57	16.56	16.12	12.32	7.74	10.68	9.62	4.44	11.56	8.47	7.78	14.54
24, 25	24.58	10.97	8.18	29.22	6.28	4.04	5.97	16.75	17.71	11.86	8.66	10.35	8.93	3.90	11.05	7.23	7.60	15.03
July 8, 9	24.71	11.54	8.69	29.90	7.17	4.21	6.84	16.83	18.73	12.43	8.92	10.74	10.06	4.49	11.69	8.37	8.25	15.20
22, 23	24.70	11.49	8.38	30.50	6.92	4.11	6.40	16.41	19.55	12.04	8.83	10.51	9.45	4.30	11.35	7.88	8.07	14.41
Aug. 5, 6	24.80	11.79	8.89	29.80	7.85	4.30	7.40	17.30	20.03	12.65	9.89	10.69	11.59	4.75	12.85	9.74	8.54	15.05
19, 20	25.08	12.23	9.05	30.03	8.40	4.82	8.00	17.77	20.87	12.74	10.86	10.92	12.45	4.93	14.46	11.32	8.23	16.10
Sept. 2, 3	25.36	12.55	8.83	30.33	8.78	5.03	8.22	18.54	21.70	12.65	11.59	10.74	12.87	4.72	15.79	12.40	8.67	16.26
16, 17	25.64	12.91	9.07	30.82	9.14	5.39	8.38	19.07	22.63	12.62	12.47	10.80	13.16	5.00	16.95	13.21	8.96	16.39
30, Oct. 1	25.90	13.36	9.45	31.02	9.47	6.62	8.87	19.75	23.51	12.95	13.45	11.17	13.43	5.16	18.15	13.93	9.40	16.35
Oct. 14, 15	26.14	13.57	8.90	31.36	9.57	6.43	8.39	20.12	24.35	12.45	13.37	11.89	13.62	4.95	19.05	14.45	9.21	16.58
28, 29	26.33	13.54	8.09	31.40	9.32	5.93	7.60	20.28	25.23	12.04	12.72	10.60	13.73	4.59	19.82	14.17	8.51	16.16
Nov. 10, 12	26.51	13.93	8.50	31.65	9.00	6.16	7.29	20.36	26.03	12.34	12.70	10.78	13.25	4.87	20.28	13.51	8.79	15.19
25, 27	26.68	14.05	7.13	31.74	8.90	5.98	7.02	20.43	26.71	11.98	12.43	10.40	12.35	4.27	20.09	13.46	8.22	15.29
Dec. 9, 10	26.70	13.43	7.33	31.54	7.50	5.15	6.12	19.09	27.53	11.55	10.60	10.40	8.73	4.39	19.30	10.51	7.59	13.17
21, 22	26.58	12.73	6.95	30.69	6.82	4.56	5.66	15.77	28.02	11.58	8.20	10.32	6.53	4.37	14.66	7.47	7.45	11.42

1 Dry

2 Interpolated

wells in the upper Pawcatuck River basin
below land-surface datum)

Exe 335	Nok 675	Ric 185	Ric 220	Sok 6	Sok 10	Sok 303	Sok 452	Sok 509	Sok 515	Sok 530	Sok 582	Sok 615	Sok 632	Sok 639	Sok 686	Sok 749	Sok 868	Wgr 204	Wgr 206	Wgr 213
4.53	28.83	17.25	7.50	12.84	9.61	5.81	15.21	14.96	² 27.35	8.72	8.05	7.34	8.61	19.02	18.58	13.18	0.66	4.06	3.56	² 5.70
4.58	28.14	16.49	7.01	11.69	6.13	5.34	14.06	14.08	26.15	7.44	7.11	5.64	8.26	17.89	17.22	12.36	.65	3.18	3.00	5.67
4.15	27.52	16.05	6.44	10.73	4.16	5.56	13.21	13.61	25.33	7.53	7.30	5.87	8.10	17.42	16.82	12.35	1.20	3.40	3.68	5.90
6.42	27.25	16.36	6.70	10.92	4.29	5.89	13.35	13.73	25.94	8.02	8.39	7.20	8.55	17.95	17.31	12.66	1.17	3.92	² 4.08	² 5.92
3.68	26.89	15.76	6.31	10.42	2.81	5.30	12.88	13.40	25.77	7.23	6.78	6.30	8.18	17.95	16.95	12.18	.55	3.23	3.33	5.85
3.40	26.74	15.74	5.74	10.23	2.83	5.40	13.08	13.70	25.64	7.21	7.77	5.67	7.80	17.73	16.60	12.14	.93	3.05	3.57	5.97
3.10	26.44	15.15	4.75	9.23	2.68	5.34	11.99	12.27	24.97	7.05	6.30	5.39	7.56	16.72	15.73	11.67	.90	2.92	3.34	5.40
3.35	25.57	15.46	4.15	8.10	2.91	5.18	11.02	11.28	24.41	6.61	6.08	5.20	7.17	15.90	15.09	11.21	.84	2.86	3.40	4.42
2.49	24.81	14.75	4.38	8.25	2.44	5.25	11.44	11.45	24.88	6.72	5.60	5.23	8.15	16.79	15.70	11.35	.50	2.41	4.00	5.04
4.15	24.49	14.66	4.51	8.53	3.30	5.44	11.17	11.06	24.81	7.17	7.03	5.98	7.95	16.74	15.63	11.53	.93	3.13	3.58	6.82
4.29	24.17	15.00	5.00	9.06	3.28	5.54	11.63	11.25	25.28	7.43	7.29	6.86	8.58	17.38	16.47	11.90	.94	3.19	3.56	7.60
6.13	24.22	15.49	5.60	9.80	3.88	5.80	12.08	11.47	25.85	8.03	8.13	7.63	8.73	17.93	17.16	12.24	.96	3.72	4.01	8.67
6.81	24.48	15.95	6.17	10.49	4.63	6.10	12.58	11.65	26.39	8.67	8.65	8.27	8.95	18.43	17.67	12.67	1.31	3.14	4.36	9.21
7.20	24.75	16.27	6.59	11.01	4.49	6.20	13.10	11.73	26.99	8.87	9.23	8.96	9.27	18.83	17.87	12.87	.97	3.80	4.56	9.97
8.37	25.02	16.70	7.01	11.56	5.87	6.44	13.53	12.93	27.39	9.30	9.30	9.28	9.37	19.18	18.11	13.23	1.61	4.13	4.98	10.39
8.35	25.32	16.92	7.38	11.94	6.11	6.64	13.85	12.09	27.78	9.55	9.65	9.72	9.52	19.42	18.46	13.49	1.58	4.22	4.96	10.44
8.43	25.63	17.20	7.78	12.29	7.29	6.84	14.11	12.29	28.15	9.89	9.94	10.19	10.20	19.69	18.77	13.73	1.63	4.27	4.95	10.67
7.59	25.91	17.20	7.65	12.05	6.39	6.50	14.11	11.94	27.96	9.45	9.65	9.37	9.26	19.58	18.29	13.50	1.46	4.28	4.78	9.33
8.78	26.15	17.43	7.92	12.31	5.99	6.51	14.29	12.30	28.21	9.71	9.71	9.06	9.34	19.54	18.44	13.73	1.37	4.43	4.94	9.85
6.86	26.32	17.06	7.34	11.77	5.36	5.90	14.29	12.04	28.05	9.04	8.43	8.10	8.82	19.35	18.02	13.28	.74	4.09	4.44	8.75
7.26	26.20	17.05	7.30	11.64	5.27	6.15	13.54	12.18	27.45	9.03	9.69	8.11	9.06	18.98	18.03	13.34	1.30	4.19	4.47	8.44
5.52	26.22	16.85	7.02	11.55	4.09	5.85	13.73	12.14	27.31	8.64	8.52	7.72	8.88	19.03	17.95	13.20	.90	3.76	3.85	7.11
6.07	26.20	16.86	7.10	11.74	4.26	5.93	13.78	12.30	27.07	8.77	8.94	7.73	9.10	18.89	17.96	13.17	.99	3.90	3.99	7.39
6.97	26.24	17.13	7.30	11.99	5.00	6.15	13.94	12.48	27.29	9.03	9.35	8.18	9.32	18.95	18.20	13.32	1.21	4.05	4.30	8.31
6.23	26.26	16.93	7.09	11.60	4.33	5.93	13.94	12.35	27.08	8.63	9.07	7.62	8.83	18.80	17.90	13.08	1.17	3.95	4.02	7.25
6.93	26.28	17.10	7.41	11.93	5.13	6.13	13.95	12.55	27.30	8.95	9.20	8.26	9.08	18.80	18.05	13.16	1.23	4.04	4.25	8.00
6.89	26.25	17.04	7.48	11.81	4.70	6.00	14.19	12.60	27.25	8.85	10.21	8.14	9.05	18.83	18.04	13.14	1.21	4.03	4.18	7.98
7.24	26.36	17.23	7.53	11.83	5.41	6.10	14.19	12.73	27.54	9.10	9.97	8.68	9.20	18.98	18.27	13.20	.64	3.99	4.21	8.41
7.30	26.41	17.24	7.70	12.02	5.19	6.00	14.20	12.96	27.65	9.11	9.72	8.71	9.19	19.11	18.39	13.28	1.07	3.56	3.79	8.36
6.10	26.10	16.70	7.34	11.65	3.77	5.65	13.78	12.70	27.11	8.40	8.43	7.89	8.79	18.67	17.83	12.79	1.06	3.81	3.92	7.23
5.72	26.11	16.56	7.14	11.34	3.54	5.50	13.70	12.54	27.08	8.15	8.48	7.89	8.92	18.51	17.80	12.47	.96	3.55	3.65	7.06
4.00	25.59	15.93	6.43	10.47	3.05	5.30	13.10	12.07	² 26.10	7.50	7.19	6.37	8.14	17.69	17.00	12.16	.92	3.26	3.55	6.13
3.52	25.53	15.80	6.04	10.33	2.76	5.32	12.97	11.82	25.69	7.28	6.95	5.98	8.02	17.55	16.71	12.05	.99	3.16	3.60	5.85
4.45	25.41	15.85	5.97	10.22	3.29	5.47	12.77	11.61	25.55	7.45	7.38	6.54	7.97	17.50	16.55	12.02	1.20	3.30	3.79	6.20
5.01	25.46	16.16	6.39	10.66	3.45	5.64	13.16	11.86	26.00	7.94	7.86	7.43	8.32	17.94	17.06	12.26	1.14	3.30	3.74	7.85
6.51	25.61	16.45	6.70	11.09	4.45	5.89	13.48	12.05	26.41	8.35	8.70	7.97	8.50	18.28	17.48	12.49	1.41	3.68	4.14	8.61
7.17	25.79	16.73	7.11	11.57	5.28	6.06	13.80	12.30	26.89	8.76	9.53	8.59	8.69	18.65	17.93	12.86	1.50	3.85	4.39	9.21
7.70	25.98	17.00	7.43	11.73	5.20	5.91	14.05	12.50	27.28	8.58	9.19	8.41	8.74	18.98	18.12	13.15	1.55	4.03	4.63	9.68
7.09	26.17	16.88	7.08	11.18	3.60	5.60	14.19	12.35	27.28	8.04	8.30	7.43	8.69	19.08	17.81	13.14	1.00	3.90	6.42	9.30
8.31	26.49	17.14	7.35	11.69	5.21	6.01	14.16	12.54	27.36	8.65	9.44	8.33	8.97	19.14	18.10	13.38	1.77	4.45	4.77	9.73
7.39	26.40	16.89	6.94	11.41	4.06	5.79	13.96	11.95	27.12	8.31	8.68	7.92	8.67	18.79	17.38	12.90	1.33	4.30	4.42	8.72
8.76	26.45	17.21	7.42	11.81	6.03	6.23	14.03	12.30	27.52	9.00	9.47	9.21	9.20	19.03	18.02	13.26	1.84	4.64	4.91	10.12
(1)	26.59	17.41	7.83	12.13	6.79	6.52	14.52	12.58	27.92	9.42	9.95	9.96	9.35	19.29	18.35	13.52	1.94	4.83	5.34	11.17
(1)	26.76	17.55	3.05	12.34	7.30	6.68	14.47	12.84	28.32	9.72	9.99	10.51	9.49	19.58	18.52	13.71	1.30	4.57	4.65	11.00
(1)	26.94	17.77	3.35	12.66	8.09	7.05	14.67	13.10	28.64	10.02	10.23	10.66	9.64	(1)	18.85	14.03	2.09	4.80	4.95	11.25
(1)	27.13	17.96	8.63	12.96	9.18	7.67	14.84	13.40	28.96	10.36	10.66	10.98	9.85	(1)	19.38	14.27	2.32	5.02	5.53	11.80
(1)	27.37	18.08	8.87	13.24	9.72	7.34	15.05	13.63	29.14	10.58	10.43	11.28	9.92	(1)	19.74	14.38	1.42	4.86	5.19	12.02
(1)	27.65	17.96	8.93	13.31	9.49	7.05	15.18	13.69	29.07	10.36	10.12	11.32	10.11	(1)	19.75	14.23	1.21	4.42	4.74	10.59
8.35	27.68	18.13	8.92	13.37	8.57	6.92	15.32	13.75	28.89	10.15	9.28	10.53	9.74	(1)	19.63	14.23	1.45	4.54	4.71	8.95
8.52	27.82	18.14	8.95	13.48	8.58	6.82	15.45	13.78	28.93	10.20	9.67	10.10	9.78	(1)	19.53	13.95	.97	3.90	4.17	8.85
5.59	27.84	17.73	8.26	12.83	6.30	6.35	15.34	13.52	28.40	9.46	9.88	8.64	9.24	19.65	18.73	13.62	1.20	3.97	3.83	6.22
5.00	27.51	17.09	7.38	12.18	4.98	5.99	14.69	13.16	27.47	8.63	8.37	7.24	8.96	18.92	17.79	13.15	1.35	3.85	3.98	6.18

Pond Levels

Staff gages were installed on the six largest ponds in the upper Pawcatuck River basin. Gages 1, 3, 4, and 6 were staff gages, driven into the bottoms of the ponds near shore and read directly. Gages 2 and 5 were wells, measured by the wetted-tape method. Altitudes of the gage zeros were determined by third-order level lines from benchmarks.

Wells used for gages 2 and 5 were ten and two feet, respectively, from the ponds they represented, and were in good hydraulic connection with them. Measurements made in the well at gage 2 corresponded with those at a nearby calibrated post on the nearby pond, but provided a more complete record.

During the winter months, thick ice obscured the true pond levels at staff gages 1, 3, 4, and 6, and made it necessary to interpolate some measurements.

Gage heights for 1958 and 1959 are given in table 7. Additional data from April 1956 through June 1960 are available at the Providence office of the U. S. Geological Survey.

Table 7.-- Gage heights, in feet above gage zero, at six pond-stage stations in the upper Pawcatuck River basin
(Altitudes are of gage zero, in feet, above mean sea level)

Station no.	1	2	3	4	5	6
Date	Barbers Pond (Alt. 114.50)	Hundred Acre Pond (Alt. 96.07)	Thirty Acre Pond (Alt. 94.52)	Larkin Pond (Alt. 93.81)	Wordens Pond (Alt. 88.72)	Tucker Pond (Alt. 93.65)
1958						
Jan. 8, 9	2.44	0.61	0.98	10.80	2.32	11.05
22, 23	1.90	.96	1.52	1 .96	2.50	11.21
Feb. 4, 5	1.74	.87	11.48	1 .91	2.39	11.14
19, 20	11.47	.55	11.18	1 .74	12.10	1 .95
Mar. 5, 6	2.09	1.05	1.77	11.15	2.70	11.40
18, 19	1.80	.95	1.60	11.06	2.65	11.31
Apr. 2, 3	1.88	1.02	1.71	11.13	2.55	11.37
16, 17	1.97	1.23	2.06	11.22	2.73	11.48
29, 30	2.04	1.30	1.97	11.30	2.73	11.55
May 14, 15	1.71	1.02	1.66	11.26	2.70	11.52
28, 29	1.80	.95	1.16	1.12	2.56	1.39
June 11, 12	1.52	.65	.92	1.03	2.17	1.34
25, 26	1.22	.61	.78	.93	1.98	1.16
July 9, 10	1.38	.43	1.00	1.00	2.17	1.26
23, 24	1.11	.14	.60	.79	1.82	1.07
Aug. 6, 7	1.10	.07	.56	.80	1.53	1.06
20, 21	1.08	.05	.52	.72	1.28	.96
Sept. 3, 4	1.20	.18	.66	.86	1.94	1.16
17, 18	1.21	.07	.48	.82	1.76	1.06
Oct. 1, 2	1.61	.61	1.04	1.04	2.26	1.22
15, 16	1.30	.19	.40	.82	2.01	1.04
29, 30	1.61	.62	1.02	.95	2.21	1.17
Nov. 12, 13	1.63	.50	.76	.90	2.23	1.15
26, 28	1.45	.26	.43	.85	2.10	1.05
Dec. 10, 11	11.58	.44	.72	11.18	2.22	11.40
22, 24	11.45	.31	.53	1 .86	2.15	11.06

Table 7. --- Gage heights, in feet above gage zero, at six pond-stage stations in the upper Pawcatuck River basin---Cont.
(Altitudes are of gage zero, in feet, above mean sea level)

Station no.	1	2	3	4	5	6
Date	Barbers Pond (Alt. 114.50)	Hundred Acre Pond (Alt. 96.07)	Thirty Acre Pond (Alt. 94.52)	Larkin Pond (Alt. 93.81)	Wordens Pond (Alt. 88.72)	Tucker Pond (Alt. 93.65)
1959						
Jan. 7, 8	11.43	0.40	0.70	11.68	2.33	11.25
21, 22	11.42	.30	.39	11.66	2.32	11.23
Feb. 4, 5	11.38	.32	.30	11.65	2.28	11.21
18, 19	11.68	.60	.86	11.93	2.56	11.48
Mar. 4, 5	1.91	.88	1.15	12.13	2.77	11.63
18, 19	1.83	1.00	1.28	12.12	2.75	11.62
Apr. 1, 2	1.88	.97	1.13	11.97	2.61	11.48
15, 16	1.79	.76	1.36	1.79	2.51	1.39
29, 30	1.68	.65	1.12	1.82	2.45	1.36
May 13, 14	1.52	.40	.88	1.76	2.27	1.26
27, 28	1.35	.29	.68	1.65	2.02	1.11
June 10, 11	1.42	.68	.70	1.33	1.93	1.06
24, 25	1.76	1.01	1.21	1.12	2.33	1.22
July 8, 9	1.40	.52	.69	.85	1.73	1.01
22, 23	1.54	.67	.94	.94	2.17	1.23
Aug. 5, 6	1.32	.36	.59	.77	1.76	1.01
19, 20	1.24	.24	.60	.77	1.48	.98
Sept. 2, 3	1.26	.34	.78	.85	1.40	.97
16, 17	1.04	.13	.46	.65	1.05	.77
30, Oct. 1	1.00	.04	.42	.55	.66	.66
Oct. 14, 15	1.09	.15	.48	.60	.95	.71
28, 29	1.22	.39	.76	.74	1.15	.81
Nov. 10, 12, 13	1.18	.20	.52	.82	1.32	.82
25, 27	1.34	.36	.44	.97	1.62	.96
Dec. 9, 10	1.36	.57	.87	.91	1.85	1.03
21, 22	1.67	.56	.91	.90	2.13	1.10

¹ Interpolated.

Stream Discharge

Continuous recording stations were installed on the Chipuxet River (Station 1), the Usquepaug River (Station 2), and the main stem of the Pawcatuck River (Station 3) to show stream discharge in the basin. Stations 1 and 2, provided no special difficulty in installation. Station 3 was located about 0.7 mile downstream from the geo-hydrologic boundary of the upper Pawcatuck River basin, because it was impractical to measure the low velocity of flow at the boundary. At each station an 18-inch still well was connected by a 2-inch intake pipe to the stream. Stevens type A automatic water-stage recorders using weekly charts were attached to the tops of the still wells.

Table 8 contains daily mean discharge records for the three continuous recording stations from November 1957 (February 1958) through June 1960. Rating tables giving the discharge for any stage were prepared from stage-discharge relation curves defined by discharge measurements. The application of the daily mean gage height to those rating tables gave the daily mean discharge. If the stage-discharge relation was subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge was determined by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers were used in applying the gage heights to the rating tables. If the stage-discharge relation for a station was temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge was computed by what was essentially the shifting-control method.

At times, the stage-discharge relation was affected by ice during the winter and it became impossible to compute the discharge in the usual manner. Discharge for periods of ice effect was computed on the basis of the gage-height record and occasional winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by engineers, and comparable records of discharge for other stations in the same or nearby basins.

In the table of daily discharge, the figures for the maximum day and the minimum day for each month were underlined. If the figure was repeated, it was underlined only on the first day of its occurrence.

Below the daily table, the line headed "Total" gives the sum of the daily figures; it is the total cfs-days for the month. The line headed "Mean" gives the average flow in cubic feet per second during the month.

Table 8.--Gaging station records for upper Pawcatuck River basin

1. Chipuxet River at West Kingston, R. I.

Location.--Lat 41°28'55", long 71°33'06", on left bank at downstream side of bridge on State Highway 138, at West Kingston, Washington County, 3.1 miles upstream from mouth.

Drainage area.--About 9.9 sq mi.

Records available.--February 1958 to July 1960.

Gage.--Water-stage recorder. Datum of gage is 89.82 feet above mean sea level, datum of 1941.

Extremes.--1958-60: Maximum daily discharge, 71 cfs Feb. 27, 1960; minimum daily, 5.9 cfs Oct. 22, 1959.

Remarks.--Records good except those for periods of no gage-height record, backwater from grass, debris, or both, or shifting control, which are fair. Discharge per square mile and runoff in inches not computed because surface-water and ground-water drainage areas do not coincide.

Discharge, in cubic feet per second, February to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1					40	54	44	56	34	15	18	22
2					41	54	44	53	34	15	17	18
3					40	48	44	50	36	13	15	14
4					36	47	43	49	37	13	14	12
5					34	44	42	48	35	14	12	11
6					32	44	43	48	33	21	10	12
7					31	43	57	48	*31	25	9.0	11
8					34	41	62	52	28	28	8.8	12
9					36	39	62	55	27	29	8.1	12
10					35	36	56	54	26	28	7.7	12
11					32	35	52	50	28	26	7.5	12
12					30	33	54	48	30	23	7.3	11
13					29	32	56	45	32	21	8.4	10
14					27	34	56	44	33	20	8.4	9.5
15					27	40	53	42	32	20	8.8	9.0
16					26	42	51	41	29	19	10	9.3
17					25	43	49	41	26	18	10	10
18					27	*41	48	40	24	16	11	12
19					27	40	47	39	24	14	11	12
20					26	41	46	39	24	13	10	11
21					25	46	45	39	24	12	8.6	11
22					24	48	45	38	24	*11	8.1	12
23					24	48	47	37	23	11	7.3	12
24					23	48	*49	36	22	11	7.0	12
25					24	48	49	36	22	10	15	11
26					27	48	46	39	20	10	29	9.7
27					29	49	44	40	19	12	34	12
28					40	48	45	38	17	13	33	25
29					-	46	51	36	17	16	32	34
30						44	56	36	16	17	29	36
31						43		35		17	26	
Total					851	1,347	1,486	1,352	807	531	441.0	416.5
Mean					30.4	43.5	49.5	43.6	26.9	17.1	14.2	13.9

* Discharge measurement made on this day.

Note.-- No gage-height record Feb. 12-19, Apr. 8-15; discharge estimated on basis of weather records and records for other stations in the Pawcatuck River basin. Discharge adjusted for backwater from grass May 12 to Sept. 30.

Table 8.--Gaging station records for upper Pawcatuck River basin--Continued

1. Chipuxet River at West Kingston, R. I.--Continued

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	36	28	30	14	14	19	44	36	13	21	13	13
2	41	26	26	23	<u>13</u>	<u>39</u>	43	36	13	18	12	<u>14</u>
3	<u>43</u>	26	24	38	13	*48	48	35	17	17	12	13
4	39	26	24	<u>39</u>	15	47	<u>51</u>	32	22	15	11	12
5	34	26	30	34	21	45	49	30	23	15	11	11
6	30	25	<u>35</u>	28	22	48	46	28	19	14	12	10
7	26	24	<u>34</u>	23	20	<u>68</u>	43	26	17	14	12	9.4
8	23	22	30	18	18	<u>66</u>	41	24	15	13	11	9.0
9	21	23	28	16	16	56	*39	22	14	<u>12</u>	13	9.0
10	<u>19</u>	26	24	14	21	48	38	21	14	13	<u>15</u>	8.7
11	17	28	23	13	35	41	39	21	13	21	15	8.2
12	16	29	21	13	38	40	41	20	<u>12</u>	28	14	7.7
13	15	28	20	13	33	41	41	21	14	31	13	7.5
14	14	26	19	<u>12</u>	32	41	40	*22	26	30	12	7.3
15	14	24	18	12	37	40	37	23	* <u>34</u>	34	11	6.9
16	13	23	18	13	<u>40</u>	45	34	22	32	<u>38</u>	11	7.3
17	13	21	17	17	37	52	32	21	26	38	10	7.3
18	13	20	16	19	32	51	30	19	25	34	10	7.3
19	12	20	*16	17	28	47	29	18	26	30	10	7.3
20	12	19	16	15	26	43	32	18	32	28	9.7	7.3
21	<u>11</u>	*18	16	16	23	41	35	18	32	24	9.2	7.1
22	11	17	16	21	20	48	36	17	28	21	9.0	7.1
23	16	16	15	25	19	54	35	19	32	19	8.7	6.9
24	29	15	14	24	19	51	32	19	32	*18	8.2	6.9
25	36	<u>14</u>	14	21	18	47	30	17	32	17	8.4	6.7
26	38	14	13	19	17	44	<u>28</u>	16	30	15	8.2	6.5
27	41	15	12	17	16	42	28	15	28	15	8.0	6.3
28	43	15	<u>11</u>	16	16	43	29	15	27	14	<u>7.7</u>	<u>6.1</u>
29	41	24	11	*15	-	41	32	<u>11</u>	24	14	9.0	6.3
30	36	<u>30</u>	12	15	-----	40	34	11	23	13	12	6.1
31	31	-----	13	15	-----	42	-----	14	-----	13	13	-----
Total	784	668	616	595	659	1,418	1,116	667	695	647	339.1	249.2
Mean	25.3	22.3	19.9	19.2	23.5	45.7	37.2	21.5	23.2	20.9	10.9	8.31

*Discharge measurement made on this day.

Note:--Discharge adjusted for backwater from grass Oct. 1 to Jan. 22, July 26 to Sept. 30. Shifting-control method used Mar. 5 to May 12, June 17-19, 22, June 25 to July 14, July 16, 17, 19-23.

Table 8.--Gaging station records for upper Pawcatuck River basin--Continued

1. Chipuxet River at West Kingston, R. I.--Continued

Discharge, in cubic feet per second, October 1959 to July 1960

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.3	11	20	26	26	<u>51</u>	43	28	19	11		
2	6.5	10	18	24	25	46	45	30	19	16		
3	6.3	10	16	26	24	43	42	30	18	20		
4	6.1	9.4	15	33	22	44	42	*30	18	22		
5	6.1	9.4	14	<u>35</u>	<u>21</u>	43	49	28	19	-		
6	6.1	9.4	<u>13</u>	32	25	41	<u>59</u>	27	<u>20</u>	-		
7	*6.1	10	17	29	31	39	58	25	19	-		
8	6.7	10	22	27	33	38	53	25	18	-		
9	7.5	10	23	25	32	36	48	25	16	-		
10	8.0	10	21	24	30	36	45	27	15	-		
11	8.4	10	19	23	30	34	43	30	14	-		
12	8.2	9.7	21	21	36	33	41	34	13	-		
13	7.5	9.7	31	21	38	32	40	<u>35</u>	14	-		
14	7.5	9.7	<u>40</u>	*21	37	32	39	33	13	-		
15	7.3	10	*37	20	36	31	38	31	13	-		
16	7.1	9.4	32	21	35	<u>30</u>	37	29	13	-		
17	6.9	9.4	28	21	32	31	36	26	12	-		
18	6.7	9.7	25	21	31	35	36	25	13	-		
19	6.5	9.7	24	22	42	37	35	24	13	-		
20	6.3	9.4	21	23	55	39	34	23	13	-		
21	6.1	9.4	18	23	53	39	33	22	12	-		
22	<u>5.9</u>	9.4	18	22	46	38	32	21	12	-		
23	*6.1	<u>9.2</u>	18	21	*41	36	31	<u>20</u>	<u>11</u>	-		
24	8.2	10	17	20	37	34	30	22	12	-		
25	11	16	17	19	35	33	30	26	12	-		
26	<u>14</u>	19	17	19	52	*32	30	29	12	-		
27	14	20	18	<u>18</u>	<u>71</u>	30	31	28	11	-		
28	13	20	19	20	65	30	31	26	11	-		
29	12	<u>21</u>	24	26	58	30	30	24	11	-		
30	11	21	27	29	-----	30	29	21	11	-		
31	10	-----	28	28	-----	36	-----	20	-----	-		-----
Total	249.4	350.9	678	740	1,099	1,119	1,170	824	427	-		
Mean	8.05	11.7	21.9	23.9	37.9	36.1	39.0	26.6	14.2	-		

*Discharge measurement made on this day.

Note:--No gage-height record Nov. 24-27; discharge estimated on basis of recorded range in stage, weather records, and records for other stations in the Pawcatuck River basin. Discharge adjusted for backwater from grass or debris, or both, Oct. 1 to Dec. 26, Feb. 28 to July 4.

Table 8.--Gaging station records for upper Pawcatuck River basin--Continued

2. Usquepaug River near Usquepaug, R. I.

Location.--Lat 41°28'35", long 71°36'19", on right bank at downstream side of bridge on State Highway 2, 1.3 miles upstream from Chickasheen Brook, 1.8 miles south of Usquepaug, Washington County, and 2.4 miles northeast of Kenyon.

Drainage area.--About 36 sq mi.

Records available.--February 1958 to July 1960.

Gage.--Water-stage recorder. Datum of gage is 89.86 feet above mean sea level, State datum.

Extremes.-- 1958-60: Maximum daily discharge, 356 cfs Apr. 8, 1958; minimum daily, 10 cfs Oct. 6, 1959.

Remarks.--Records good except those for periods of ice effect, no gage-height record, backwater from grass, or shifting control, which are fair. Discharge per square mile and runoff in inches not computed because surface-water and ground-water drainage areas do not coincide.

Discharge, in cubic feet per second, February to September 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1					154	347	166	243	107	39	52	48
2					143	279	168	201	100	38	56	41
3					135	197	165	174	110	35	46	36
4					125	177	158	172	111	35	38	33
5					115	178	146	174	100	39	33	33
6					110	177	145	169	90	61	29	35
7					104	166	285	187	*83	73	26	34
8					120	151	356	226	77	64	26	39
9					125	136	279	236	75	62	24	42
10					125	126	215	209	74	52	23	41
11					115	118	201	179	77	44	22	44
12					110	112	247	162	85	42	21	39
13					105	108	269	153	93	44	26	35
14					100	111	244	145	96	54	33	31
15					100	145	214	135	91	54	34	29
16					95	171	191	130	79	48	36	28
17					90	160	176	129	69	42	38	33
18					95	*144	165	125	63	36	45	*41
19					95	134	157	119	63	34	40	44
20					92	138	150	116	68	34	33	41
21					90	173	144	116	68	32	29	38
22					86	190	142	112	66	*30	27	41
23					86	191	164	107	63	30	25	41
24					82	184	*185	107	57	30	24	37
25					86	180	169	104	54	28	42	33
26					95	183	148	138	53	28	77	32
27					105	197	132	188	51	41	88	36
28					155	194	136	160	47	42	81	75
29					-	180	222	139	44	42	70	93
30					-----	166	274	135	41	45	67	89
31		-----			-----	159	-----	120	-----	40	57	-----
Total					3,038	5,222	5,813	4,810	2,255	1,318	1,268	1,262
Mean					108	170	194	155	75.2	42.5	40.9	42.1

*Discharge measurement made on this day.

Note.--No gage-height record Feb. 3-5, 8-28; discharge estimated on basis of weather records and records for other stations in the Pawcatuck River basin. Discharge adjusted for backwater from grass Apr. 26 to Sept. 30.

Table 8.--Gaging station records for upper Pawcatuck River basin--Continued

2. Usquepaug River near Usquepaug, R. I.--Continued

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	77	86	106	58	50	80	149	110	46	42	31	37
2	105	80	91	77	45	110	143	110	46	40	30	31
3	118	80	79	106	43	*130	168	106	67	38	27	27
4	102	84	79	110	58	125	200	96	74	36	26	27
5	85	84	93	100	83	123	176	87	59	33	26	25
6	72	81	103	88	75	140	153	83	51	32	29	22
7	64	78	100	76	59	299	144	79	50	34	27	19
8	61	75	89	66	56	277	137	78	46	31	26	18
9	59	76	80	61	42	193	*130	75	42	29	29	17
10	58	85	75	56	75	151	126	72	39	28	35	16
11	57	91	70	53	110	131	138	70	36	64	32	15
12	55	91	66	52	115	127	149	69	34	89	28	15
13	53	85	65	51	105	132	142	68	45	87	25	13
14	53	78	65	50	100	138	131	*78	82	67	23	13
15	53	75	64	49	110	133	120	81	83	75	21	13
16	52	73	65	54	120	149	112	74	*64	86	20	25
17	52	71	64	62	115	191	106	66	52	81	19	25
18	51	70	63	68	105	181	102	83	58	63	19	21
19	50	68	*63	60	94	155	98	63	66	53	19	18
20	49	67	64	55	86	137	101	64	76	49	18	16
21	49	*65	62	60	78	130	120	61	59	46	17	15
22	48	64	57	72	74	170	123	60	50	44	16	14
23	61	62	56	80	72	189	110	68	65	41	15	13
24	92	61	57	75	71	160	98	58	66	*39	16	13
25	105	61	56	70	70	140	93	54	58	38	18	12
26	104	59	52	62	67	129	89	52	64	36	19	11
27	116	63	51	58	66	126	89	50	58	33	17	11
28	137	62	51	54	67	131	93	50	55	31	17	11
29	125	85	51	*53	-	126	101	64	53	29	18	12
30	107	107	56	53	-----	122	111	55	48	28	26	12
31	94	-----	63	54	-----	134	-----	50	-----	27	38	-----
Total	2,364	2,267	2,156	2,043	2,211	4,659	3,752	2,234	1,692	1,449	727	537
Mean	76.3	75.6	69.5	65.9	79.0	150	125	72.1	56.4	46.7	23.5	17.9

*Discharge measurement made on this day.

Note.--No gage-height record Jan. 5-27, Feb. 12-Mar. 3; discharge estimated on basis of weather records and records for other stations in the Pawcatuck River basin. Stage-discharge relation affected by ice Dec. 11, 13, 21, 22, 25. Discharge adjusted for backwater from grass Oct. 1 to Nov. 19, May 15 to Sept. 30.

Table 8.--Gaging station records for upper Pawcatuck River basin--Continued

2. Usquepaug River near Usquepaug, R. I.--Continued

Discharge, in cubic feet per second, October 1959 to July 1960

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	34	64	85	66	159	188	76	57	33		
2	14	33	54	73	63	140	178	91	61	58		
3	12	30	50	79	59	132	145	90	57	60		
4	11	29	48	114	58	132	143	*79	57	54		
5	11	29	46	127	57	132	216	74	70	-		
6	10	28	45	108	76	131	304	71	65	-		
7	*11	32	57	92	100	123	268	69	55	-		
8	14	39	88	83	105	115	216	68	51	-		
9	25	37	87	77	89	110	186	76	48	-		
10	33	34	73	71	79	105	168	92	46	-		
11	25	31	61	68	79	100	155	97	44	-		
12	23	30	68	66	101	96	146	102	44	-		
13	22	30	128	66	110	94	140	98	46	-		
14	22	29	190	*66	98	93	131	93	44	-		
15	22	29	*163	67	94	91	124	83	43	-		
16	20	26	127	74	90	89	119	75	44	-		
17	18	28	108	72	83	90	114	70	41	-		
18	17	32	99	66	79	105	110	68	43	-		
19	16	31	92	69	116	116	108	72	42	-		
20	15	29	87	71	223	118	103	66	39	-		
21	16	28	81	65	203	116	98	63	37	-		
22	15	28	77	62	157	112	94	59	36	-		
23	*16	28	74	59	*131	104	91	59	35	-		
24	33	31	72	58	117	96	89	77	38	-		
25	83	63	68	56	110	94	91	94	40	-		
26	60	78	68	55	170	*91	91	91	36	-		
27	45	66	69	54	294	87	89	72	33	-		
28	42	56	72	64	253	88	86	63	31	-		
29	36	74	85	85	193	91	81	58	30	-		
30	31	75	100	86	-----	93	77	56	32	-		
31	29	-----	98	76	-----	118	-----	57	-----	-		
Total	759	1,147	2,599	2,314	3,453	3,361	4,149	2,359	1,345	-		
Mean	24.5	38.2	83.8	74.6	119	108	138	76.1	44.8	-		

*Discharge measurement made on this day.

Note.--Stage-discharge relation affected by ice Jan. 11-14, Mar. 2, 7-12. Discharge adjusted for backwater from grass Oct. 1 to Dec. 13, May 7 to July 4. Shifting-control method used Feb. 20 to July 4.

Table 8.-- Gaging station records for upper Pawcatuck River basin--Continued

3. Pawcatuck River at Kenyon, R. I.

Location.--Lat 41°26'45", long 71°37'34", on right bank at upstream side of dam and intake pipe at Kenyon Piece Dyeworks, Inc., at Kenyon, Washington County, 400 feet upstream from Pasquiset Brook.

Drainage area.--About 73 sq mi (ground-water drainage area is about 60 sq mi).

Records available.--November 1957 to July 1960.

Gage.--Water-stage recorder. Datum of gage is 81.91 feet above mean sea level, datum of 1941.

Extremes.--1957-60: Maximum daily discharge, 639 cfs Apr. 9, 1958; minimum daily, 24 cfs Sept. 29, 30, Oct. 5-7, 1959.

Remarks.--Records good except those for periods of ice effect, no gage height record, or backwater from grass, which are fair. Discharge per square mile and runoff in inches not computed because surface-water and ground-water drainage areas do not coincide.

Discharge, in cubic feet per second, November 1957 to September, 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			49	132	334	424	324	502	226	85	82	119
2			51	142	306	514	320	453	222	82	82	101
3			45	156	275	465	320	396	238	79	85	90
4			45	140	250	396	310	375	230	77	77	85
5			44	119	238	396	301	360	222	85	69	79
6			40	107	213	391	306	354	209	107	62	79
7			47	119	205	375	514	386	*193	125	58	77
8			60	193	238	349	632	424	178	132	54	82
9			74	209	210	324	639	453	167	132	51	82
10			110	220	220	296	566	447	156	122	49	90
11			152	222	200	273	528	396	167	110	45	90
12			167	180	174	251	540	365	170	98	45	85
13		32	156	156	170	230	547	329	170	92	49	82
14		30	145	149	205	247	534	301	182	90	51	77
15		42	125	280	135	296	489	287	174	98	54	69
16		47	107	430	150	315	435	273	167	95	58	67
17		45	98	514	140	329	391	256	149	90	62	67
18		40	90	465	150	*315	354	242	135	82	67	*72
19		44	87	380	150	291	324	234	128	77	67	74
20		54	85	315	145	296	301	234	125	74	62	77
21		54	104	269	145	349	287	230	125	69	58	77
22		47	122	315	145	396	278	222	128	*67	54	79
23		44	139	*365	145	408	306	218	122	65	49	74
24		42	135	413	145	402	*320	213	122	62	47	72
25		38	116	413	142	391	324	213	116	62	77	72
26		37	107	447	156	386	301	242	110	60	110	67
27		35	116	495	163	391	269	278	107	72	135	74
28		35	122	508	266	386	291	315	101	74	145	119
29		38	132	471	-	370	365	291	95	82	156	142
30		42	128	418	-----	339	477	260	90	79	142	156
31		-----	122	375	-----	324	-----	247	-----	77	132	-----
Total			3,120	9,117	5,415	10,915	11,893	9,796	4,724	2,701	2,334	2,576
Mean			101	294	193	352	396	316	157	87.1	75.3	85.9

*Discharge measurement made on this day.

Note:--No gage-height record Feb. 9-11, 16-24; discharge estimated on basis of weather records and records for Pawcatuck River at Stage-discharge relation affected by ice Jan. 4, 10, 12, 19, 20, Feb. 3, 4.

Table 8.--Gaging station records for upper Pawcatuck River basin--Continued

3. Pawcatuck River at Kenyon, R. I.--Continued

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	167	167	178	113	101	142	296	209	104	119	69	72
2	170	156	178	159	90	205	306	205	101	107	65	*72
3	186	156	167	174	85	*251	339	201	125	101	62	62
4	193	152	178	189	107	278	370	189	135	92	60	60
5	182	156	193	175	128	260	380	178	139	87	62	54
6	159	156	201	150	135	310	349	170	122	79	65	49
7	142	152	200	130	119	418	310	163	110	79	62	44
8	132	145	182	115	110	502	296	156	104	77	60	40
9	122	149	174	105	101	489	*282	145	95	72	69	40
10	116	163	160	100	128	408	278	142	90	69	77	38
11	113	167	142	94	170	339	287	135	82	122	74	35
12	107	170	135	92	175	282	291	132	79	152	67	33
13	104	167	132	92	182	310	301	128	95	174	62	32
14	98	159	125	92	170	360	282	*142	132	186	60	30
15	95	156	125	92	209	324	264	145	156	193	54	30
16	92	152	125	110	210	334	242	145	*156	197	51	33
17	90	149	125	125	209	360	230	139	139	189	51	38
18	90	142	125	120	201	380	213	128	132	174	49	37
19	87	139	122	104	185	354	201	125	142	156	47	37
20	*87	139	128	104	160	324	209	125	159	135	45	33
21	87	*135	122	113	145	301	209	122	159	122	44	32
22	85	132	113	152	125	349	218	122	142	116	45	28
23	104	128	110	142	125	370	218	122	159	110	44	27
24	128	128	113	132	132	380	201	122	163	*101	44	27
25	149	125	110	125	125	344	182	113	167	95	45	25
26	174	125	104	119	125	320	174	107	156	92	44	25
27	189	125	98	110	122	306	170	104	159	85	42	25
28	193	125	98	104	125	301	174	98	152	77	40	25
29	205	156	101	*98	-	282	193	104	139	74	40	24
30	197	167	113	107	-----	278	197	116	132	69	47	24
31	178	-----	116	107	-----	291	-----	113	-----	65	60	-----
Total	4,221	4,438	4,293	3,744	3,999	10,152	7,662	4,345	3,925	3,566	1,706	1,131
Mean	136	148	138	121	143	327	255	140	131	115	55.0	37.7

*Discharge measurement made on this day.

Note.--No gage-height record Jan. 6-13; discharge estimated on basis of weather records and records for Pawcatuck River at Wood River Junction. Stage-discharge relation affected by ice Dec. 7, 10, Jan. 5, 18, Feb. 11, 12, 16, 19, 20, Mar. 13, 14. Discharge adjusted for backwater from grass June 22 to Sept. 30.

Table 8.--Gaging station records for upper Pawcatuck River basin--Continued

3. Pawcatuck River at Kenyon, R. I.--Continued

Discharge, in cubic feet per second, October 1959 to July 1960

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	69	145	189	159	453	282	152	122	54		
2	27	67	132	170	152	370	324	163	119	77		
3	27	67	119	193	145	315	315	170	122	92		
4	27	65	110	213	142	222	315	167	119	101		
5	24	65	107	234	135	242	391	152	125			
6	24	62	104	238	159	275	508	142	135	-		
7	*24	65	132	218	193	305	547	135	125	-		
8	27	74	149	201	205	301	528	135	110	-		
9	38	77	163	182	205	278	465	139	98	-		
10	45	74	167	159	189	256	408	152	92	-		
11	49	74	152	145	197	234	360	182	87	-		
12	45	69	159	142	218	226	329	193	85	-		
13	42	67	213	142	226	213	306	201	85	-		
14	44	65	260	142	242	205	287	197	82	-		
15	44	62	*306	145	240	197	269	186	82	-		
16	42	62	287	156	218	193	256	170	79	-		
17	40	62	251	159	205	197	242	156	79	-		
18	38	68	226	159	193	213	230	149	79	-		
19	37	68	213	159	278	222	218	149	79	-		
20	35	64	197	163	324	234	209	145	74	-		
21	33	62	178	156	375	238	197	139	69	-		
22	33	61	163	149	365	230	193	128	67	-		
23	35	60	156	145	320	222	186	125	65	-		
24	54	74	142	139	278	213	182	145	65	-		
25	77	105	139	135	256	205	178	167	67	-		
26	92	125	142	128	408	193	178	178	67	-		
27	92	135	145	125	489	189	178	170	62	-		
28	87	135	156	139	547	186	174	149	56	-		
29	79	140	182	156	521	182	167	132	54	-		
30	67	150	186	174	-----	189	156	125	54	-		
31	65	-----	197	170	-----	230	-----	122	-----	-		-----
Total	1,418	2,393	5,378	5,125	7,584	7,428	8,578	4,815	2,604	-		
Mean	45.7	79.8	173	165	262	240	286	155	86.8	-		

*Discharge measurement made on this day.

Note.--No gage-height record Nov. 17-23, 25-30, Dec. 1; discharge estimated on basis of weather records, recorded range in stage, and records for Pawcatuck River at Wood River Junction. Stage-discharge relation affected by ice Dec. 23, Jan. 9, 10, Feb. 15, 16, and Mar. 2, 6, 7, 9-12. Discharge adjusted for backwater from grass Oct. 1 to Dec. 9.

During the autumn of 1959, three series of low-flow discharge measurements were made at six miscellaneous measuring sites on the principal tributary streams in the basin. Table 9 gives the low-flow discharge measurements in September and October 1959 at the six miscellaneous sites.

The U. S. Geological Survey also maintains a permanent gaging station at Wood River Junction on the Pawcatuck River about 5 miles downstream from the basin. Records from this station are published from the 1940 to 1960 water years in Geological Survey Water-Supply Papers.

Table 9. ---Low-flow discharge measurements at six miscellaneous sites in the upper Pawcatuck River basin

(Discharge measurements made during September and October 1959)

Site No.	Stream	Tributary to	Location	Approximate drainage area (sq mi)	Measurements	
					Date	Discharge (cfs)
1	Chipuxet River.	Pawcatuck River.	Lat 41°31'03", long 71°31'33", about a quarter of a mile below Yorker Mill Pond, and 1 mile south of Slocum.	6	9-10-59 10- 7-59 10-22-59	2.75 2.03 2.12
2	White Horn Brook.	Chipuxet River.	Lat 41°27'46", long 71°33'19", at bridge on Ministerial Rd., 1.4 miles south of West Kingston.	3	9-10-59 10- 8-59 10-23-59	.73 1.69 1.17
3	Queen River.	Usquepaug River.	Lat 41°33'45", long 71°32'55", above bridge on Reynolds Rd., 1.1 miles south of Exeter.	4	9-10-59 10- 7-59 10-22-59	.51 .60 .88
4	Fisherville Brook.	Queen River.	Lat 41°33'51", long 71°33'54", at bridge on Liberty Rd., 1.6 miles southwest of Exeter.	8	9-10-59 10- 7-59 10-22-59	2.59 1.78 2.61
5	Locke Brook.	Queen River.	Lat 41°32'13", long 71°35'17", at bridge on Mail Rd., 2.6 miles northeast of Usquepaug.	4	9-10-59 10- 7-59 10-22-59	.87 1.44 1.58
6	Chickasheen Brook.	Usquepaug River.	Lat 48°28'48", long 71°34'26", below bridge on Liberty Lane, 1 mile southwest of Kingston.	4	9-10-59 10- 7-59 10-22-59	2.26 .94 1.13

Pumping Tests

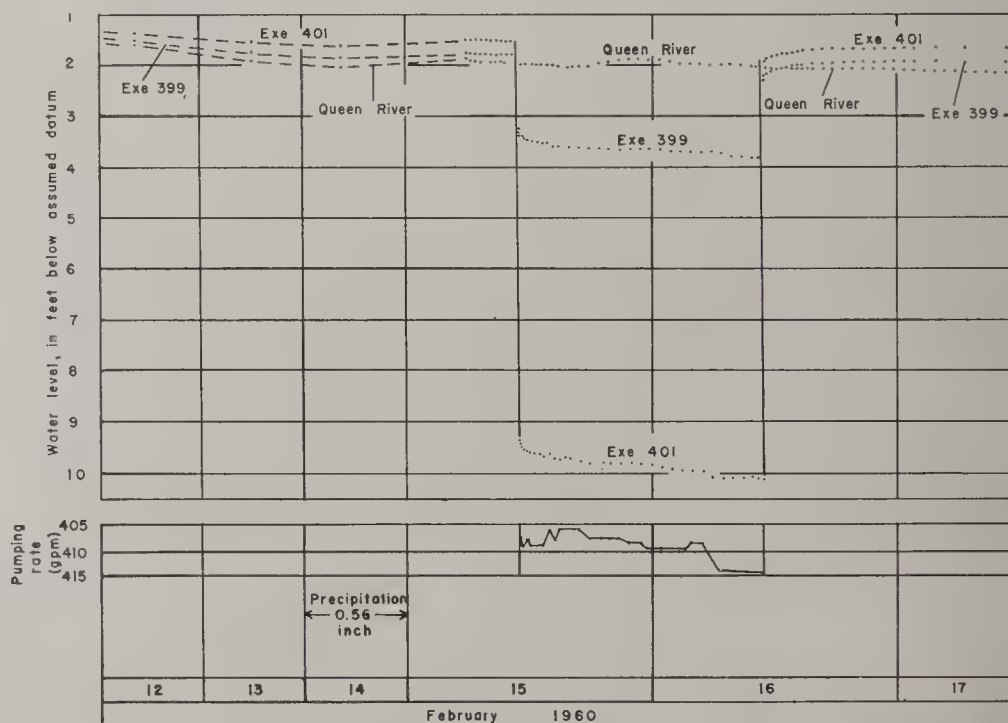
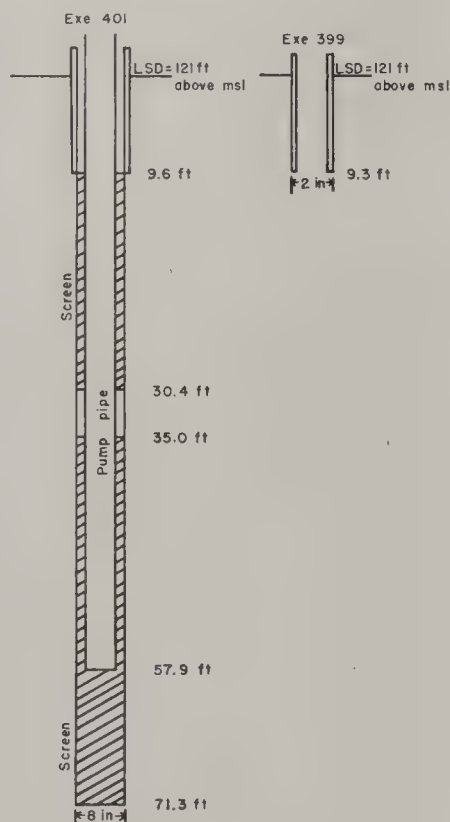
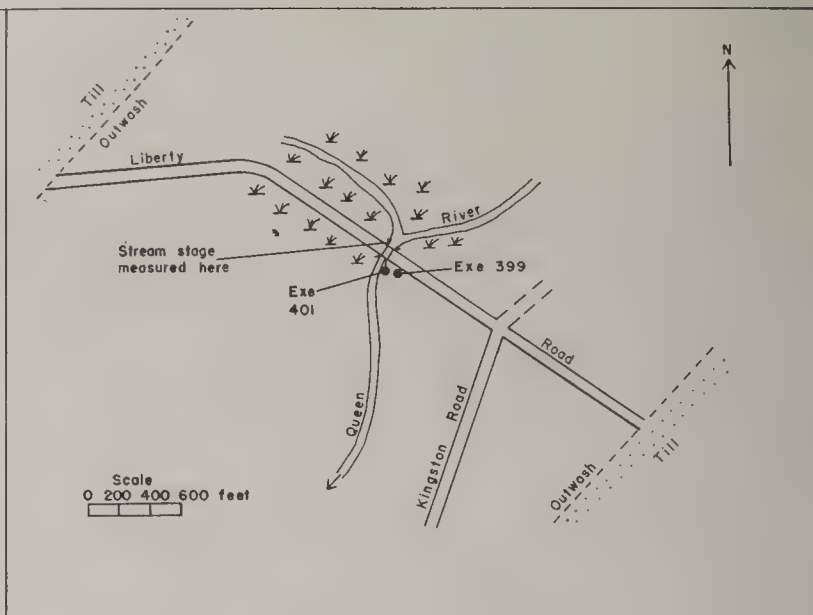
Test wells Exe 400-402 and Sok 905-908 and observation wells Exe 396-399 and Sok 900-903 were constructed at eight sites for pumping tests. Each site was tested by pumping for 24 hours and observing the decline of water levels in the pumping well and the adjacent observation well. After pumping ceased, the recovery of the water levels was also observed, generally for 24 hours. Additional data were provided by observing water levels prior to pumping and during short "shakedown" tests.

Not all measurements of water levels made during the pumping tests are tabulated in this report. However, hydrographs of each well were plotted from these data and presented as figure 2, together with a table of selected measurements and drawdown and recovery data. The site of each test is described in the figure by a map and a sketch showing well construction. The data from well Exe 400 were not considered usable.

Also included in this report are the results of a 48-hour pumping test made by the R. E. Chapman Co. on well Sok 1040 for the Gilbane Co. of Providence, R. I. Measurements in nearby observation wells Sok 1024, 1026, and 1037 were used for pumping-test analysis.

PUMPED WELL Exe 401
OBSERVATION WELL Exe 399

Both wells penetrate sand and gravel of Pleistocene age. The pumped well is 26 feet south of Liberty Road and 52 feet west of Queen River. The observation well is 5 feet northeast of the pumped well. Water pumped was discharged into Queen River. Stream stage used to correct drawdown and recovery measurements. Drawdown affected by recharge from Queen River. The assumed datum is land-surface datum (lsd) at well Exe 399 which is 121 feet above mean sea level (msl) (measured with altimeter). For log of pumped well, see table 1.

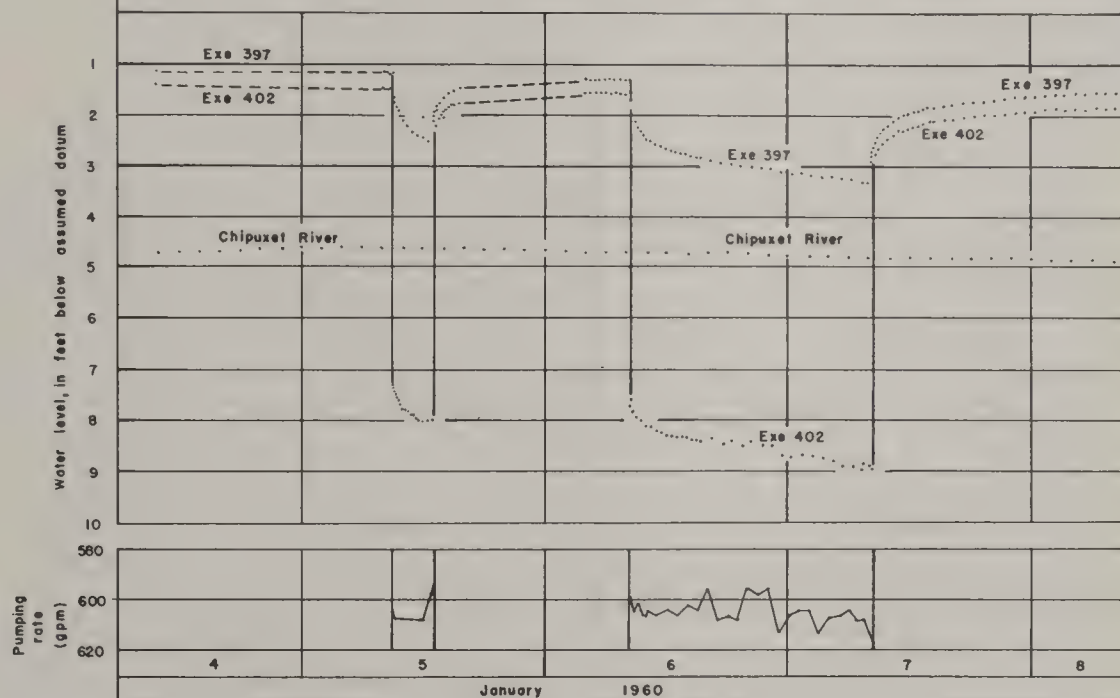
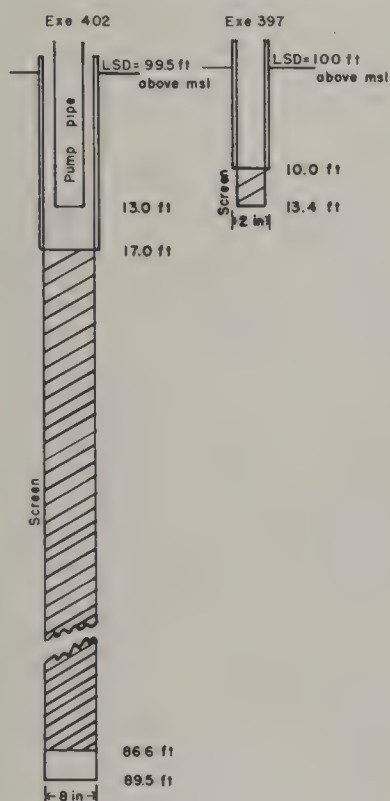
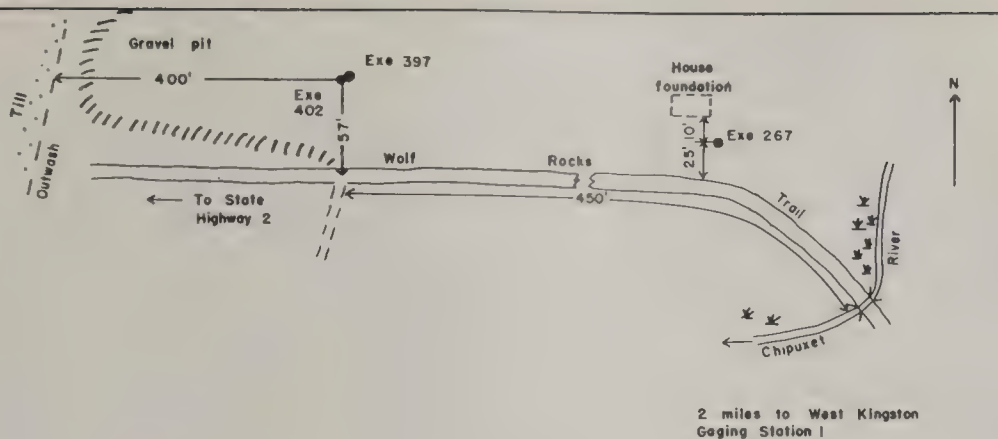


Date and time	Time since pumping started (min)	Depth to water below lsd (ft)		Corrected drawdown (ft)		Date and time	Time since pumping stopped (min)	Depth to water below lsd (ft)		Corrected recovery (ft)	
		Exe 401	Exe 399	Exe 401	Exe 399			Exe 401	Exe 399	Exe 401	Exe 399
Feb. 15, 1960						Feb. 16, 1960					
11:00 a.m.	0	1.57	1.84			11:00 a.m.	0	10.18	3.88		
11:01	1	4.03	1.84	2.46	--	11:01	1	2.30	2.59	7.88	1.29
11:02	2	9.15	--	7.58	--	11:02	2	2.18	2.48	8.00	1.40
11:03	3	9.40	3.28	7.83	1.44	11:03	3	2.10	2.43	8.08	1.45
11:04	4	9.40	3.32	7.83	1.48	11:04	4	2.05	2.40	8.13	1.48
11:05	5	9.45	3.30	7.87	1.46	11:05	5	2.03	2.37	8.15	1.51
11:10	10	9.49	3.38	7.91	1.53	11:10	10	1.98	2.31	8.21	1.57
11:15	15	9.50	3.39	7.92	1.54	11:15	15	1.96	2.28	8.23	1.60
11:20	20	9.54	3.42	7.95	1.57	11:20	20	1.95	2.25	8.25	1.63
11:25	25	9.55	3.43	7.96	1.58	11:25	25	1.94	2.24	8.26	1.64
11:30	30	9.56	3.44	7.97	1.58	11:30	30	1.92	2.23	8.28	1.66
11:40	40	9.59	3.46	8.00	1.60	11:40	40	1.90	2.21	8.31	1.68
11:50	50	9.60	3.48	8.00	1.62	11:50	50	1.89	2.19	8.32	1.71
12:00	60	9.62	3.50	8.02	1.63	12:00	60	1.88	2.18	8.33	1.72
12:20 p.m.	80	9.64	3.51	8.04	1.64	12:20 p.m.	80	1.87	2.16	8.35	1.74
12:40	100	9.67	3.53	8.07	1.66	12:40	100	1.86	2.13	8.36	1.77
1:30	150	9.70	3.58	8.09	1.70	1:30	150	1.83	2.10	8.39	1.80
2:20	200	9.72	3.61	8.10	1.72	2:20	200	1.80	2.07	8.41	1.83
3:10	250	9.76	3.64	8.13	1.74	3:10	250	1.79	2.06	8.43	1.84
4:00	300	9.78	3.66	8.14	1.76	4:00	300	1.78	2.04	8.44	1.87
5:40	400	9.82	3.69	8.20	1.82	5:40	400	1.77	2.02	8.45	1.89
7:20	500	9.85	3.68	8.29	1.86	7:20	500	1.77	2.01	8.46	1.90
9:00	600	9.87	3.68	8.37	1.92	9:00	600	1.76	2.00	8.47	1.92
Feb. 16, 1960						Feb. 17, 1960					
12:20 a.m.	800	9.91	3.69	8.39	1.91	12:20 a.m.	800	1.75	2.00	8.52	1.94
3:40	1,000	10.00	3.75	8.44	1.92	3:40	1,000	1.75	2.00	8.53	1.97
11:00	1,440	10.18	3.88	8.51	1.96	11:00	1,440	1.76	2.01	8.54	1.98

FIGURE 2. PUMPING-TEST DATA IN THE UPPER PAWCATUCK RIVER BASIN

PUMPED WELL Exe 402
OBSERVATION WELL Exe 397

Both wells penetrate sand and gravel of Pleistocene age. The pumped well is 57 feet north of Wolf Rocks trail and 450 feet west of the Chipuxet River. The observation well is 4 feet north-east of the pumped well. Water pumped was discharged into a swamp 360 feet east of the pumped well. A preliminary test was made on January 5 to determine pumping rate for 24-hour test on January 6-8. Drawdown was not affected by recharge from the Chipuxet River but the river stage at the West Kingston gaging station, about two miles downstream, is believed to indicate the regional trend in water level during the pumping test. The drawdown measurements are corrected for this trend. The assumed datum is land-surface datum (lsd) at well Exe 397, which is 100 feet above mean sea level (msl) (measured with altimeter). For log of pumped well, see table 1.

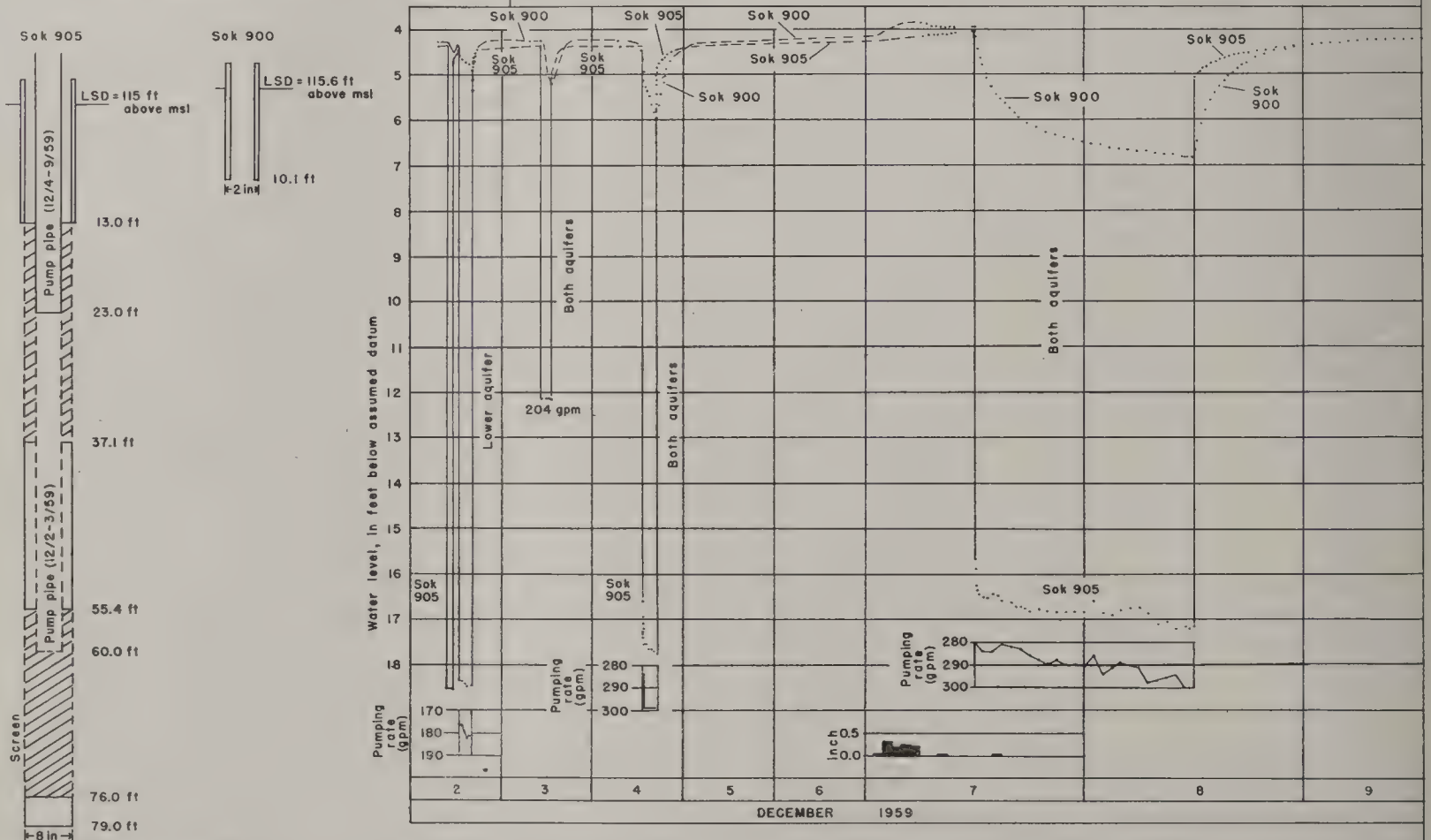
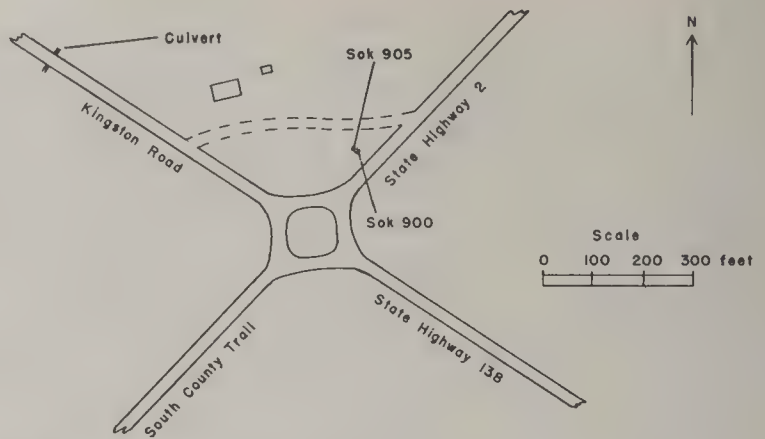


Date and time	Time since pumping started (min)	Depth to water below lsd (ft)		Corrected drawdown (ft)		Date and time	Time since pumping stopped (min)	Depth to water below lsd (ft)		Corrected recovery (ft)	
		Exe 402	Exe 397	Exe 402	Exe 397			Exe 402	Exe 397	Exe 402	Exe 397
Jan. 6, 1960						Jan. 7, 1960					
8:17 a.m.	0	1.04	1.33			8:17 a.m.	0	8.40	3.35		
8:18	1		1.77		0.44	8:18	1	2.52	2.95	5.83	0.40
8:19	2	7.03	1.79	5.99	.46	8:19	2	2.48	2.91	5.87	.44
8:20	3	6.98	1.82	5.94	.49	8:20	3	2.45	2.88	5.90	.47
8:21	4	7.05	1.85	6.01	.52	8:21	4	2.44	2.85	5.91	.50
8:22	5	7.08	1.87	6.04	.54	8:22	5	2.43	2.83	5.92	.52
8:27	10	7.11	1.96	6.07	.63	8:27	10	2.36	2.74	5.99	.61
8:32	15	7.16	2.02	6.12	.69	8:32	15	2.31	2.67	6.04	.68
8:37	20	7.19	2.07	6.15	.74	8:37	20	2.27	2.62	6.09	.74
8:42	25		2.12		.79	8:42	25	2.23	2.58	6.13	.78
8:47	30	7.23	2.15	6.19	.82	8:47	30	2.20	2.54	6.16	.82
8:57	40	7.31	2.22	6.27	.89	8:57	40	2.15	2.47	6.22	.89
9:07	50	7.37	2.27	6.33	.94	9:07	50	2.10	2.41	6.27	.96
9:17	60	7.34	2.32	6.30	.99	9:17	60	2.05	2.36	6.33	1.01
9:27	70	7.47	2.40	6.43	1.07	9:27	70	1.99	2.28	6.40	1.10
9:37	80	7.52	2.47	6.47	1.13	9:37	80	1.94	2.22	6.46	1.17
10:45	150	7.61	2.58	6.55	1.23	10:45	150	1.82	2.11	6.61	1.30
11:37	200	7.69	2.66	6.63	1.31	11:37	200	1.75	2.03	6.70	1.41
12:27 p.m.	250	7.73	2.72	6.67	1.37	12:27 p.m.	250	1.69	1.97	6.74	1.49
1:17	300	7.77	2.77	6.70	1.41	1:17	300	1.64	1.91	6.86	1.57
2:57	400	7.81	2.86	6.73	1.49	2:57	400	1.57	1.84	7.00	1.70
4:37	500	7.84	2.92	6.77	1.55	4:37	500	1.52	1.80	7.09	1.77
6:17	600	7.85	2.98	6.80	1.60	6:17	600	1.49	1.76	7.17	1.86
9:37	800	7.96	3.08	6.83	1.64	9:37	800	1.43	1.69	7.35	2.02
Jan. 7, 1960						Jan. 8, 1960					
12:57 a.m.	1,000	8.15	3.18	6.92	1.69	12:57 a.m.	1,000	1.37	1.63	7.53	2.17
8:17	1,440	8.40	3.35	7.05	1.75	8:17	1,440	1.31	1.58	7.79	2.42

FIGURE 2. PUMPING-TEST DATA IN THE UPPER PAWCATUCK RIVER BASIN - Continued

PUMPED WELL Sok 905
OBSERVATION WELL Sok 900

Both wells penetrate sand and gravel of Pleistocene age. The pumped well is 46 feet west of State Highway 2 and 160 feet northeast of State Highway 138. The observation well is 5 feet southeast of the pumped well. Water pumped was discharged into culvert about 600 feet west of the pumped well. Preliminary tests were made on December 2 with the lower screen exposed and on December 3 and 4 with both screens exposed to develop the upper and lower aquifers and to determine the pumping rate for the 24-hour test on December 7-9. The drawdown measurements for the 24-hour test are corrected for regional trend. The assumed datum is land-surface datum (lsd) at well Sok 905 which is 115 feet above mean sea level (measured with altimeter). For log of pumped well, see table 1.

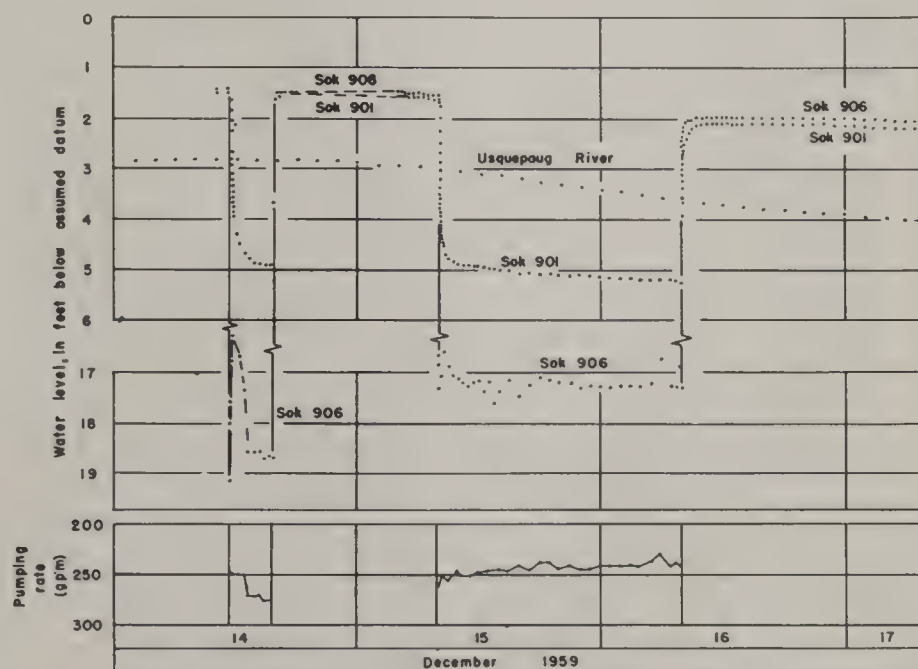
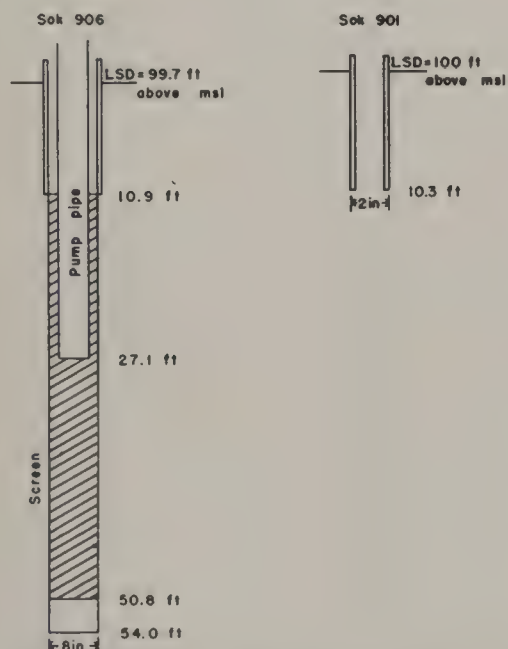
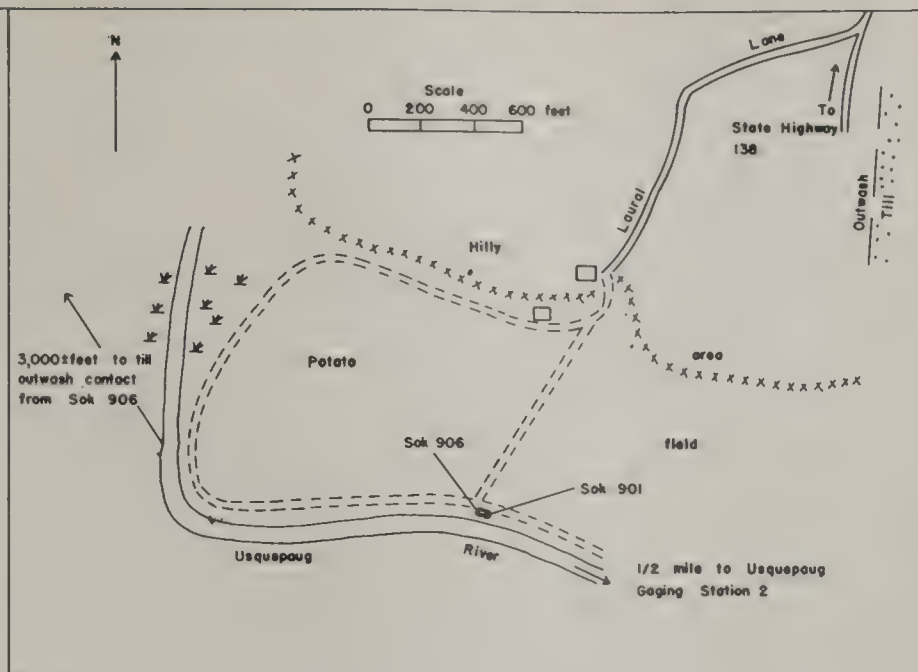


Date and time	Time since pumping started (min)	Depth to water below lsd (ft)		Corrected drawdown (ft)		Date and time	Time since pumping stopped (min)	Depth to water below lsd (ft)		Corrected recovery (ft)	
		Sok 905	Sok 900	Sok 905	Sok 900			Sok 905	Sok 900	Sok 905	Sok 900
Dec. 7, 1959											
11:59 a.m.	0	4.08	4.53			11:59 a.m.	0	17.15	7.42		
12:00	1	15.65	4.53	11.57	0.00	12:00	1	5.96	7.42	11.25	0.00
12:01 p.m.	2	15.87	4.54	11.79	.01	12:01 p.m.	2	5.63	7.41	11.58	.01
12:02	3	15.96	4.55	11.88	.02	12:02	3	5.45	7.41	11.76	.01
12:03	4	16.03	4.56	11.95	.03	12:03	4	5.35	7.40	11.86	.02
12:04	5	15.83	4.58	11.75	.05	12:04	5	5.28	7.39	11.93	.03
12:09	10	16.28	4.68	12.20	.15	12:09	10	5.13	7.33	12.08	.09
12:14	15	16.35	4.77	12.27	.24	12:14	15	5.08	7.26	12.13	.17
12:19	20	16.41	---	12.33	---	12:19	20	5.04	7.19	12.17	.24
12:24	25	16.42	---	12.34	---	12:24	25	5.01	7.12	12.21	.31
12:29	30	16.44	5.02	12.36	.49	12:29	30	4.99	7.06	12.23	.37
12:39	40	16.47	---	12.40	---	12:39	40	4.95	6.91	12.27	.53
12:49	50	16.50	---	12.43	---	12:49	50	4.91	---	12.31	---
12:53	60	16.48	5.39	12.41	.86	12:59	60	4.89	---	12.33	---
1:19	80	16.54	---	12.47	---	1:19	80	4.84	---	12.38	---
1:39	100	16.46	---	12.40	---	1:39	100	4.79	---	12.44	---
2:29	150	16.45	6.02	12.39	1.48	2:29	150	4.72	5.99	12.51	1.49
3:19	200	16.59	---	12.44	---	3:19	200	4.65	5.79	12.59	1.73
4:09	250	16.61	6.32	12.58	1.79	4:09	250	4.60	5.59	12.65	1.92
4:59	300	16.71	6.51	12.67	1.96	4:59	300	4.55	5.45	12.70	2.09
6:39	400	16.76	6.75	12.74	2.15	6:39	400	4.49	5.24	12.78	2.35
8:19	500	16.80	6.85	12.79	2.30	8:19	500	4.43	5.12	12.85	2.50
9:59	600	16.82	6.98	12.82	2.41	9:59	600	4.39	5.02	12.90	2.65
Dec. 8, 1959											
1:19 a.m.	800	16.71	7.13	12.65	2.54	1:19 a.m.	800	4.34	4.91	12.99	2.83
4:39	1,000	16.75	7.24	12.80	2.64	4:39	1,000	4.29	4.83	13.06	3.00
11:59	1,440	17.15	7.42	13.26	2.79	11:59	1,440	4.23	4.77	13.17	3.24

FIGURE 2. PUMPING-TEST DATA IN THE UPPER PAWCATUCK RIVER BASIN - Continued

PUMPED WELL Sok 906
OBSERVATION WELL Sok 901

Both wells penetrate sand and gravel of Pleistocene age. The pumped well is 3,700 feet north of South County Trail and 50 feet north of Usquepaug River. The observation well is 4 feet east of the pumped well. Water pumped was discharged into the Usquepaug River. A preliminary test was made on December 14 to determine pumping rate for 24-hour test on December 15-17. Drawdown was affected by recharge from Usquepaug River. The stage of the Usquepaug River at the gaging station near Usquepaug, about half a mile downstream, indicates regional trend. The drawdown and recovery are corrected for regional trend. The assumed datum is land-surface datum (lsd) at well Sok 901, which is 100 feet above mean sea level (msl) (measured with altimeter). For log of pumped well, see table 1.

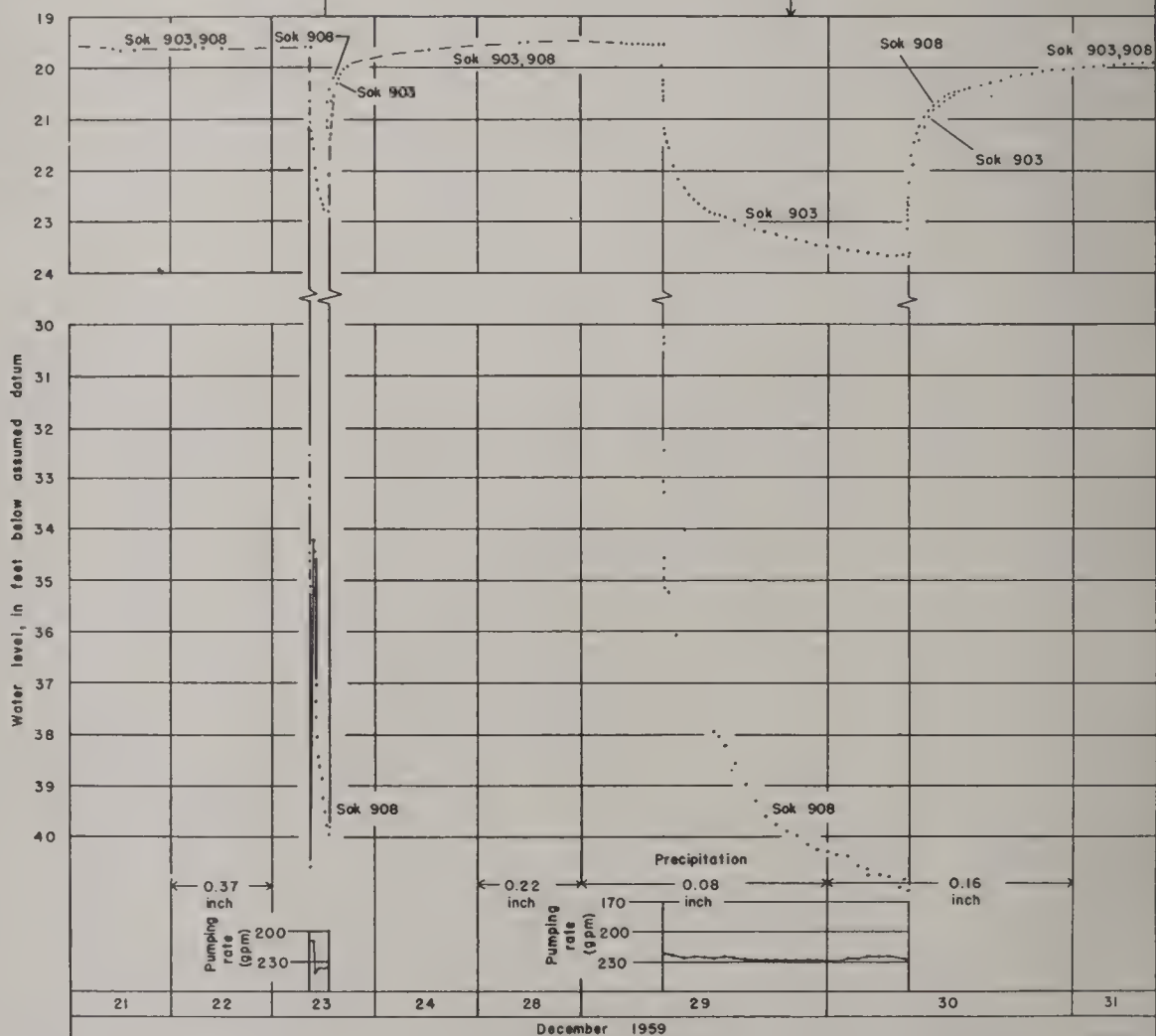
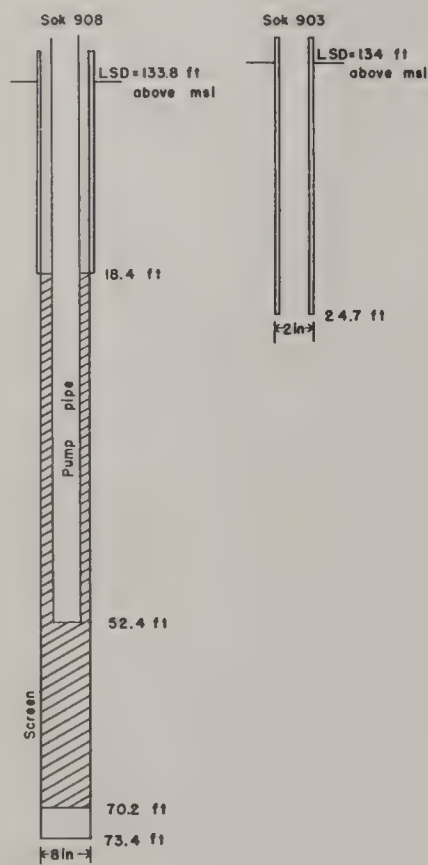
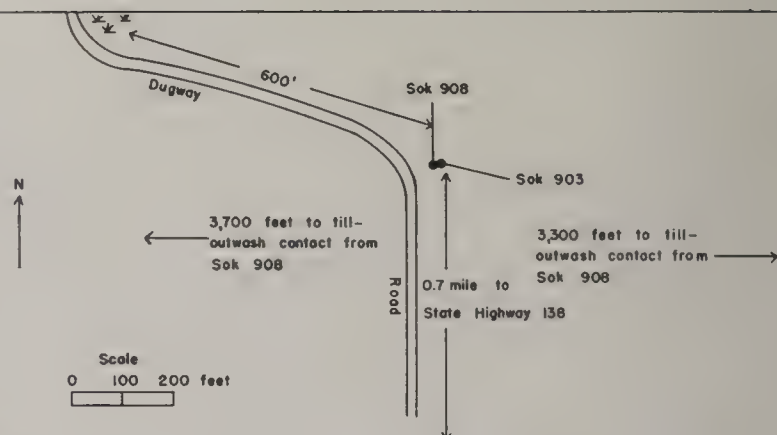


Date and time	Time since pumping started (min)	Depth to water below lsd (ft)		Corrected drawdown (ft)		Date and time	Time since pumping stopped (min)	Depth to water below lsd (ft)		Corrected recovery (ft)	
		Sok 906	Sok 901	Sok 906	Sok 901			Sok 906	Sok 901	Sok 906	Sok 901
Dec. 15, 1959						Dec. 16, 1959					
8:00 a.m.	0	1.22	1.61			8:00 a.m.	0	16.98	5.20		
8:01	1	17.13	1.73	15.91	0.12	8:01	1	2.22	3.88	14.72	1.32
8:02	2	16.94	2.00	15.62	.39	8:02	2	2.11	3.54	14.83	1.66
8:03	3	15.75	2.25	14.53	.63	8:03	3	2.06	3.32	14.88	1.88
8:04	4	17.04	2.47	15.82	.85	8:04	4	2.00	3.19	14.94	2.01
8:05	5	16.02	2.67	14.80	1.05	8:05	5	1.98	3.09	14.96	2.11
8:10	10	17.32	3.45	16.10	1.83	8:10	10	1.88	2.77	15.06	2.43
8:15	15	16.75	3.91	15.53	2.29	8:15	15	1.83	2.59	15.11	2.61
8:20	20	16.78	4.20	15.56	2.58	8:20	20	1.79	2.48	15.15	2.72
8:25	25	16.90	4.38	15.68	2.76	8:25	25	1.77	2.40	15.17	2.80
8:30	30	16.27	4.49	15.04	2.86	8:30	30	1.76	2.34	15.18	2.87
8:40	40	17.00	4.62	15.77	2.99	8:40	40	1.73	2.25	15.21	2.96
8:50	50	16.87	4.69	15.64	3.06	8:50	50	1.72	2.20	15.22	3.01
9:00	60	16.59	4.74	15.35	3.09	9:00	60	1.70	2.16	15.24	3.05
9:10	70	16.74	4.79	15.50	3.14	9:10	70	1.67	2.11	15.27	3.11
9:20	80	16.52	4.82	15.28	3.16	9:20	80	1.66	2.09	15.28	3.13
9:30	90	16.89	4.86	15.65	3.19	9:30	90	1.65	2.06	15.29	3.17
10:30	150	16.93	4.89	15.69	3.20	10:30	150	1.64	2.05	15.30	3.19
11:20	200	16.89	4.91	15.62	3.19	11:20	200	1.63	2.05	15.31	3.20
12:10 p.m.	250	16.84	4.92	15.56	3.18	12:10 p.m.	250	1.63	2.04	15.31	3.23
1:00	300	16.95	4.97	15.59	3.20	1:00	300	1.63	2.04	15.31	3.23
2:40	400	16.95	4.97	15.59	3.20	2:40	400	1.63	2.04	15.31	3.23
4:20	500	17.06	5.01	15.74	3.20	4:20	500	1.64	2.06	15.30	3.25
6:00	600	16.79	5.01	15.46	3.16	6:00	600	1.64	2.06	15.30	3.27
9:20	800	16.92	5.06	15.55	3.13	9:20	800	1.66	2.08	15.28	3.30
Dec. 16, 1959						Dec. 17, 1959					
12:40 a.m.	1,000	16.96	5.11	15.56	3.10	12:40 a.m.	1,000	1.68	2.11	15.26	3.32
9:00	1,440	16.98	5.20	15.50	3.03	9:00	1,440	1.72	2.15	15.22	3.38

FIGURE 2. PUMPING-TEST DATA IN THE UPPER PAWCATUCK RIVER BASIN -- Continued

PUMPED WELL Sok 908
OBSERVATION WELL Sok 903

Both wells penetrate sand and gravel of Pleistocene age. The pumped well is 31 feet east of Dugway Road and 0.7 mile north of State Highway 138. The observation well is 5 feet east of the pumped well. Water pumped was discharged into a swamp about 600 feet northwest of the pumped well. A preliminary test was made on December 23 to determine pumping rate for 24-hour test on December 29-31. The assumed datum is land-surface datum (lsd) at well Sok 903 which is 134 feet above mean sea level (msl) (measured with altimeter). For log of pumped well, see table 1.

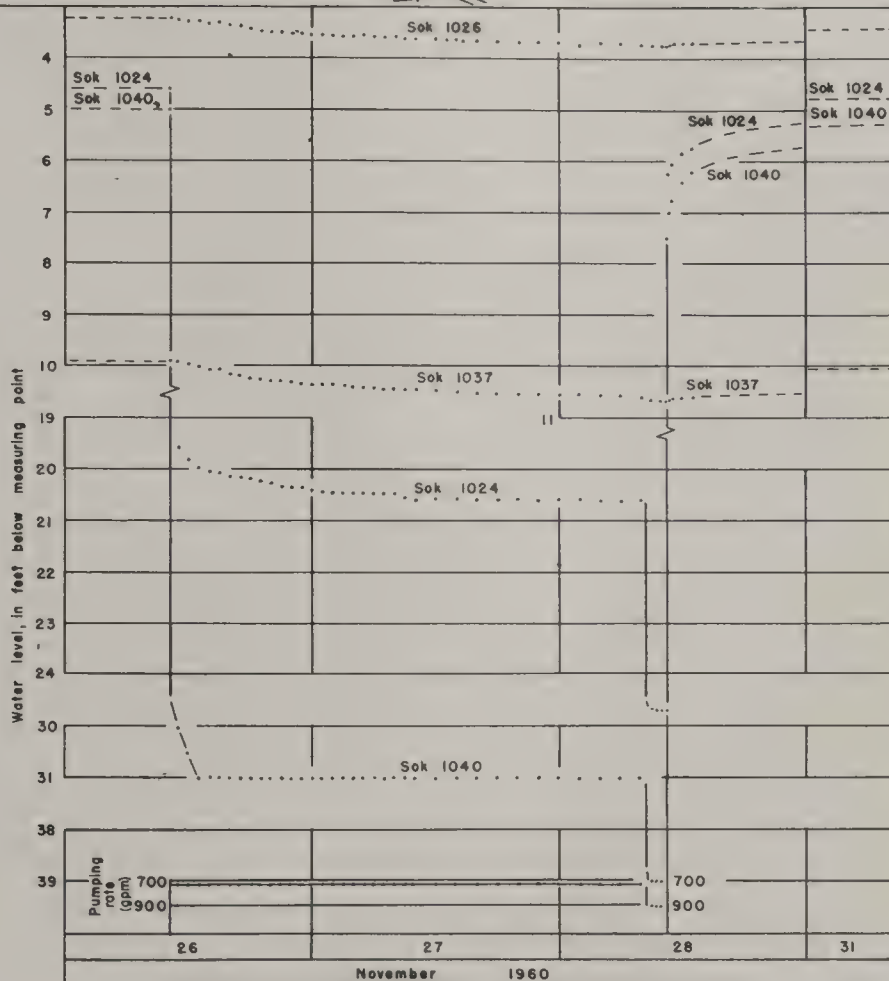
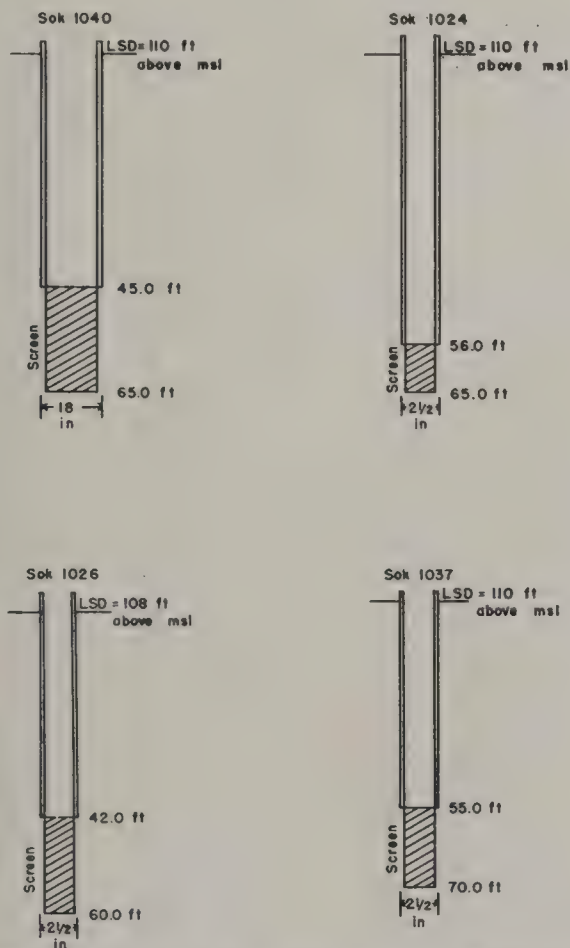
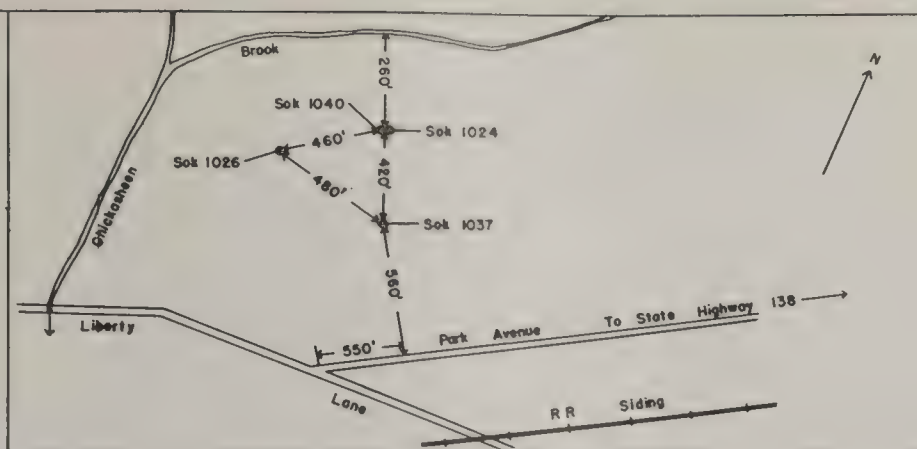


Date and time	Time since pumping started (min)	Depth to water below lsd (ft)		Uncorrected drawdown (ft)		Date and time	Time since pumping stopped (min)	Depth to water below lsd (ft)		Uncorrected recovery (ft)	
		Sok 908	Sok 903	Sok 908	Sok 903			Sok 908	Sok 903	Sok 908	Sok 903
Dec. 29, 1959											
8:00 a.m.	0	19.32	19.46			8:00 a.m.	0	40.84	23.69		
8:01	1	29.19	20.43	9.87	0.97	8:02	1	22.01	23.11	18.61	0.58
8:02	2	30.06	20.73	10.74	1.27	8:03	2	21.92	22.96	18.70	.73
8:03	3	30.17	20.82	10.85	1.36	8:04	3	21.86	22.84	18.76	.85
8:04	4	32.26	20.87	12.94	1.41	8:05	4	21.79	22.77	18.83	.92
8:05	5	32.86	20.95	13.54	1.49	8:06	5	21.76	22.69	18.86	1.00
8:10	10	34.73	--	15.41	--	8:11	10	21.58	22.40	19.04	1.29
8:15	15	34.94	21.27	15.62	1.81	8:16	15	21.48	22.21	19.14	1.48
8:20	20	35.07	21.38	15.75	1.92	8:21	20	21.39	22.06	19.23	1.63
8:25	25	35.26	21.48	15.94	2.02	8:26	25	21.31	21.94	19.31	1.76
8:30	30	35.51	21.57	16.19	2.11	8:31	30	21.24	21.82	19.38	1.83
8:40	40	--	21.70	--	--	8:41	40	21.12	21.65	19.51	2.05
8:50	50	--	21.82	--	--	8:51	50	21.03	21.51	19.60	2.20
9:00	60	--	21.92	--	--	9:01	60	20.95	21.40	19.68	2.31
9:20	80	--	22.09	--	--	9:21	80	20.82	21.20	19.82	2.52
9:40	100	--	22.21	--	--	9:41	100	20.70	21.06	19.95	2.67
10:30	150	--	22.46	--	--	10:31	150	20.52	20.82	20.14	2.93
11:20	200	--	22.61	--	--	11:21	200	20.39	20.65	20.29	3.11
12:10 p.m.	240	--	--	--	--	12:11 p.m.	250	20.30	20.55	20.40	3.24
1:03	300	37.75	22.83	18.41	3.37	1:01	300	20.22	20.45	20.49	3.35
2:40	460	38.21	22.94	18.89	3.48	2:41	400	20.11	20.33	20.63	3.51
4:20	500	38.89	23.07	19.57	3.61	4:21	500	20.06	20.27	20.72	3.61
6:00	600	39.39	23.19	20.07	3.73	6:01	600	19.98	20.17	20.83	3.75
9:20	800	39.79	23.36	20.47	3.90	9:21	800	19.87	20.06	21.01	3.93
Dec. 30, 1959											
12:40 a.m.	1,000	40.05	23.47	20.77	4.01	Dec. 31, 1959					
8:00	1,440	40.84	23.69	21.52	4.23	12:41 a.m.	1,000	19.81	19.99	21.13	4.07
						8:01	1,440	19.69	19.88	21.40	4.37

FIGURE 2. PUMPING-TEST DATA IN THE UPPER PAWCATUCK RIVER BASIN - Continued

PUMPED WELL Sok 1040
OBSERVATION WELLS Sok 1024, 1026, 1037

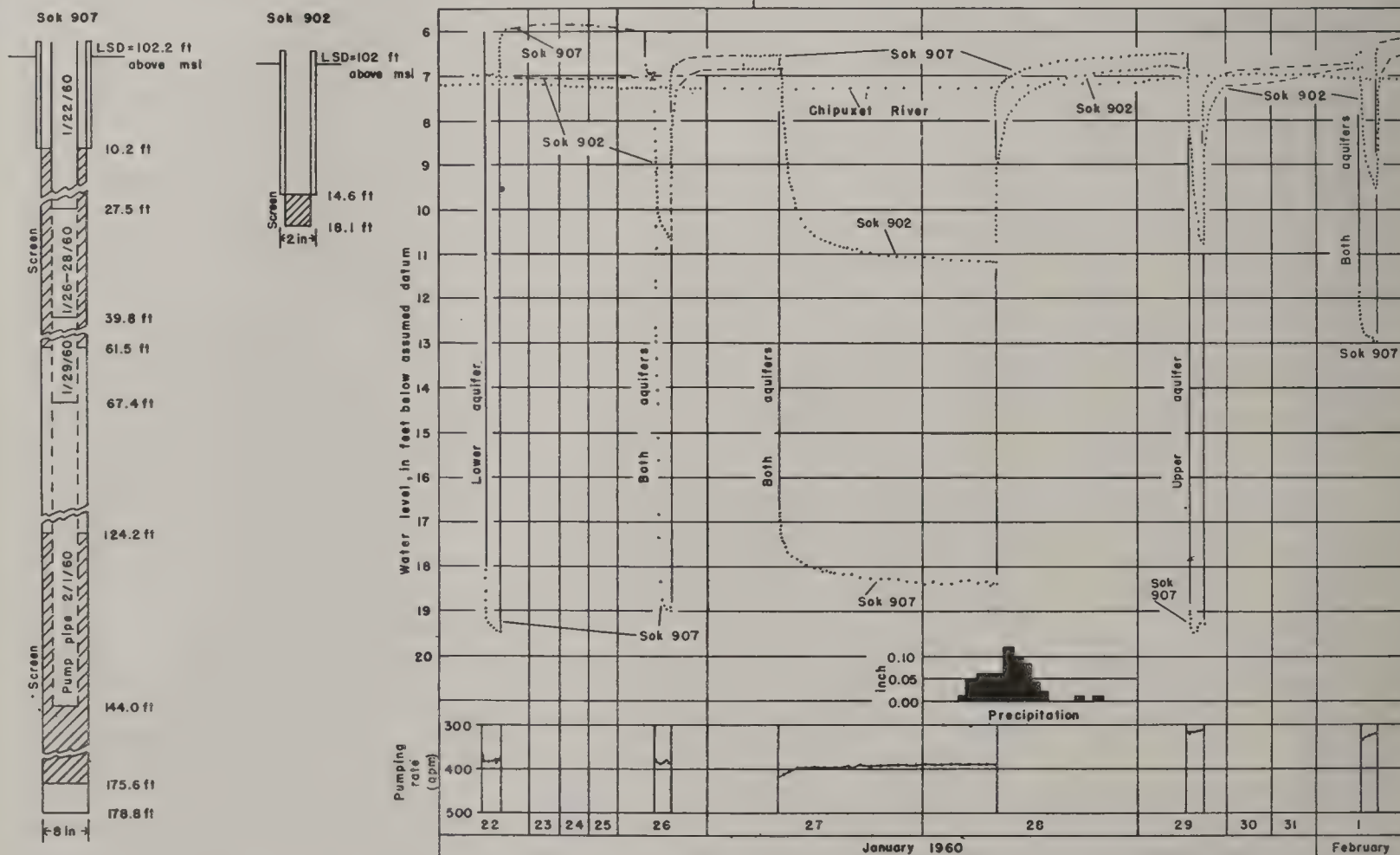
All wells penetrate sand and gravel of Pleistocene age. The pumped well is 980 feet northwest of Park Ave. and 260 south of Chickasheen Brook. Observation well Sok 1024 is about 5 feet northeast of the pumped well. Water pumped was discharged towards Chickasheen Brook at a point 120 feet from the pumped well. Water levels are shown below measuring point which is less than one foot above land-surface datum (lsd). Altitude of land-surface datum is interpolated from the Kingston 7½-minute topographic map.



Date and time	Time since pumping started or stopped (min)	Depth to water below measuring point (ft)				Uncorrected drawdown (ft)				Date and time	Time since pumping started or stopped (min)	Depth to water below measuring point (ft)				Uncorrected recovery (ft)			
		Sok 1040	Sok 1024	Sok 1026	Sok 1037	Sok 1040	Sok 1024	Sok 1026	Sok 1037			Sok 1040	Sok 1024	Sok 1026	Sok 1037	Sok 1040	Sok 1024	Sok 1026	Sok 1037
Nov. 26, 1960																			
10:15 a.m.	0	5.0	4.58	3.21	9.91														
11:00	30	30.0	19.58	3.25	9.91	25.0	15.00	0.04	0.00										
12:00	90	30.5	19.83	3.29	9.95	25.5	15.25	.08	.04										
1:00 p.m.	150	31.0	19.95	3.29	10.00	26.0	15.37	.08	.09										
2:00	210	31.0	20.04	3.33	10.04	26.0	15.46	.12	.13										
3:00	270	31.0	20.08	3.33	10.04	26.0	15.50	.12	.13										
4:00	330	31.0	20.14	3.37	10.12	26.0	15.56	.16	.21										
5:00	390	31.0	20.17	3.39	10.17	26.0	15.59	.18	.26										
6:00	450	31.0	20.19	3.44	10.21	26.0	15.61	.23	.30										
7:00	510	31.0	20.21	3.48	10.25	26.0	15.63	.27	.34										
8:00	570	31.0	20.27	3.50	10.27	26.0	15.69	.29	.36										
9:00	630	31.0	20.33	3.50	10.29	26.0	15.75	.29	.38										
10:00	690	31.0	20.35	3.52	10.31	26.0	15.77	.31	.40										
11:00	750	31.0	20.37	3.52	10.33	26.0	15.79	.31	.42										
12:00	810	31.0	20.39	3.54	10.33	26.0	15.81	.33	.42										
Nov. 27, 1960																			
2:00 a.m.	930	31.0	20.44	3.56	10.37	26.0	15.86	.35	.46										
4:00	1,050	31.0	20.46	3.58	10.42	26.0	15.88	.37	.51										
6:00	1,170	31.0	20.48	3.60	10.44	26.0	15.90	.39	.53										
a. Pumping rate increased b. Recovery																			

PUMPED WELL Sok 907
OBSERVATION WELL Sok 902

Both wells penetrate sand and gravel of Pleistocene age. The pumped well is 54 feet southwest of State Highway 138 and 49 feet northwest of Ministerial Road. The observation well is 5.3 feet east of the pumped well. Water pumped was discharged into the Chipuxet River about 200 feet northwest of the pumped well. Short tests were made on January 22 with the lower screen exposed, on January 26 and February 1 with both screens exposed, and on December 29 with the upper screen exposed. The short tests were to develop the aquifer, to indicate the relative yields of the upper and lower aquifers and/or to determine the pumping rate for the 24-hour test on January 27-29. The stage of the Chipuxet River at the West Kingston gaging station, indicates regional trend. The assumed datum is land-surface datum (lsd) at well Sok 902, which is 102 feet above mean sea level (msl) (measured with altimeter). For log of pumped well, see table 1.



Date and time	Time since pumping started (min)	Depth to water below lsd (ft)		Uncorrected drawdown (ft)		Date and time	Time since pumping stopped (min)	Depth to water below lsd (ft)		Uncorrected recovery (ft)	
		Sok 907	Sok 902	Sok 907	Sok 902			Sok 907	Sok 902	Sok 907	Sok 902
Jan. 27, 1960											
8:16 a.m.	0	6.75	6.82			8:16 a.m.	0	18.49	11.15		
8:17	1	16.99	6.90	10.24	0.08	8:17	1	8.08	10.70	10.49	0.46
8:18	2	17.04	6.98	10.29	.16	8:18	2	7.96	10.62	10.61	.54
8:19	3	17.12	7.07	10.37	.25	8:19	3	7.89	10.53	10.68	.63
8:20	4	17.17	7.14	10.42	.32	8:20	4	7.85	10.44	10.72	.72
8:21	5	17.24	7.22	10.49	.40	8:21	5	7.78	10.36	10.79	.80
8:26	10	17.53	7.54	10.78	.72	8:26	10	7.66	9.95	10.91	1.21
8:31	15	17.61	7.84	10.86	1.02	8:31	15	7.55	9.60	11.02	1.56
8:36	20	17.70	8.08	10.95	1.26	8:36	20	7.49	9.29	11.08	1.87
8:41	25	17.73	8.30	10.98	1.48	8:41	25	7.45	9.04	11.12	2.12
8:46	30	17.76	8.49	11.01	1.67	8:46	30	7.42	8.83	11.15	2.33
8:56	40	17.84	8.83	11.09	2.01	8:56	40	7.37	8.50	11.20	2.66
9:06	50	17.89	9.08	11.14	2.26	9:06	50	7.33	8.29	11.24	2.87
9:16	60	17.88	9.31	11.13	2.49	9:16	60	7.30	8.14	11.27	3.02
9:36	80	18.02	9.65	11.27	2.83	9:36	80	7.24	7.94	11.33	3.23
9:56	100	17.97	9.90	11.22	3.08	9:56	100	7.20	7.81	11.38	3.36
10:46	150	18.14	10.28	11.39	3.46	10:46	150	7.12	7.58	11.46	3.60
11:36	200	18.19	10.48	11.43	3.66	11:36	200	7.06	7.43	11.52	3.76
12:26 p.m.	250	18.22	10.63	11.47	3.81	12:26 p.m.	250	7.00	7.32	11.56	3.87
1:16	300	18.28	10.68	11.53	3.86	1:16	300	6.96	7.23	11.62	3.97
2:56	400	18.33	10.81	11.58	3.99	2:56	400	6.89	7.09	11.70	4.13
4:36	500	18.38	10.88	11.63	4.06	4:36	500	6.86	7.01	11.73	4.23
6:16	600	18.44	10.96	11.69	4.14	6:16	600	6.82	6.95	11.78	4.30
9:36	800	18.49	11.04	11.74	4.22	9:36	800	6.78	6.89	11.83	4.40
Jan. 28, 1960											
12:56 a.m.	1,000	18.55	11.09	11.80	4.27	Jan. 29, 1960	1,000	6.74	6.84	11.88	4.48
8:16	1,440	18.49	11.15	11.74	4.33	8:16	1,440	6.70	6.77	11.94	4.62

FIGURE 2. PUMPING-TEST DATA IN THE UPPER PAWCATUCK RIVER BASIN - Continued

Quality of Water

Samples of surface water were collected at 13 sites on 9 streams in the upper Pawcatuck River basin. Samples were taken in autumn and spring to be representative of the low and high periods of stream-flow. Most samples were analyzed by the U. S. Geological Survey.

Samples of ground water were collected at 3 wells penetrating bedrock, 30 wells penetrating glacial outwash, and 8 wells penetrating glacial till. Several samples were taken from each of the test wells Exe 402 and Sok 905-908; at Sok 905 and 907, samples were from different water-bearing strata. More than one analysis was included from wells Sok 8, 108 and 887. About half of the samples were analyzed by the U. S. Geological Survey; the remainder by the Rhode Island Division of Sanitary Engineering.

Table 10 gives the results of analyses of surface-water samples; table 11 gives the results of analyses of ground-water samples.

Table 10. — Chemical analyses of surface water
(Analyses by U.S. Geological Survey, Albany, N.Y., and Washington, D.C., unless otherwise indicated)

Stream	Latitude	Longitude	Date of collection	Iron (Fe)		Silica (SiO ₂)	Manganese (Mn)		Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Dissolved solids (residue on evaporation at 180°C)	Total hardness (CaCO ₃)	Non-carbonate hardness	Specific conductance (micromhos at 25°C)	pH	Temperature (°F)	Color
				Dissolved	Total		Dissolved	Total															
Chickasheen Brook	41°28'49"	71°34'26"	Oct. 8, 1958	0.23	0.25	—	0.00	0.00	—	—	—	—	4	—	—	—	42	14	—	47	6.0	54	50
Do.	do.	do.	Apr. 7, 1959	.00	.07	—	.00	.00	—	—	—	—	3	—	—	—	37	12	—	52	5.4	20.2	30
Chipuxet River	41°31'03"	71°31'33"	Oct. 8, 1958	.37	.48	—	.00	.00	—	—	—	—	25	—	—	—	116	25	—	172	6.4	54	—
Do. ¹	do.	do.	Apr. 7, 1959	.00	.30	—	.00	.05	—	—	—	—	6	—	—	1.5	46	17	—	58	5.8	45	30
Do.	41°28'56"	71°33'05"	July 28, 1924	—	.16	5.0	—	—	3.2	1.3	4.6	0.9	11	7.5	5.0	1.0	36	13	4	—	6.3	—	18
Do.	do.	do.	Mar. 5, 1951	—	.10	10	—	—	5.2	4.1	—	—	4	12	11	.0	63	30	26	—	6.5	—	35
Do.	do.	do.	Oct. 8, 1958	.18	.44	—	.00	.04	—	—	—	—	13	—	—	—	65	27	—	91	6.4	60	40
Do.	do.	do.	Apr. 7, 1959	.00	.16	—	.00	.08	—	—	—	—	6	—	—	—	49	19	—	67	5.7	51	15
Fishersville Brook	41°33'51"	71°33'54"	Oct. 8, 1958	.17	.20	—	.00	.00	—	—	—	—	3	—	—	—	40	8	—	37	6.1	51	45
Do.	do.	do.	Apr. 7, 1959	.00	.03	—	.00	.01	—	—	—	—	4	—	—	—	32	9	—	37	5.6	43.3	20
Glen Rock Brook	41°30'59"	71°36'17"	Oct. 8, 1958	.08	.25	—	.00	.00	—	—	—	—	2	—	—	—	34	6	—	33	6.1	52	35
Do.	do.	do.	Apr. 7, 1959	.00	.06	—	.00	.03	—	—	—	—	4	—	—	—	29	7	—	33	5.5	45.7	15
Locke Brook	41°32'13"	71°35'17"	Oct. 8, 1958	.08	.18	—	.00	.00	—	—	—	—	4	—	—	—	38	8	—	39	6.4	52	35
Do.	do.	do.	Apr. 7, 1959	.00	.07	—	.00	.04	—	—	—	—	4	—	—	—	33	10	—	37	5.6	44.5	25
Pawcatuck River	41°26'42"	71°37'44"	Aug. 28, 1925	—	.65	6.0	—	—	2.8	.9	4.6	.9	7	5.3	5.6	1.1	42	11	5	—	6.5	—	30
Do. ¹	do.	do.	Mar. 22, 1951	—	.20	10	—	—	3.6	1.7	—	—	7	6.7	8.0	.0	47	16	10	—	5.2	—	55
Do.	do.	do.	Oct. 8, 1958	.30	.33	—	.00	.00	—	—	—	—	4	—	—	—	53	14	—	51	5.9	52	85
Do.	do.	do.	Apr. 7, 1959	.05	.22	—	.03	.03	—	—	—	—	4	—	—	.7	37	12	—	48	5.5	47.5	40
Queen River	41°33'39"	71°32'58"	Oct. 8, 1958	.17	.18	—	.00	.02	—	—	—	—	3	—	—	—	46	10	—	41	6.0	52	55
Do.	do.	do.	Apr. 7, 1959	.00	.14	—	.00	.04	—	—	—	—	4	—	—	—	33	11	—	37	5.7	43.2	25
Do.	41°32'20"	71°34'09"	Oct. 8, 1958	.19	.22	—	.00	.00	—	—	—	—	4	—	—	—	41	10	—	42	6.0	51	50
Do.	do.	do.	Apr. 7, 1959	.00	.08	—	.00	.03	—	—	—	—	4	—	—	—	36	12	—	45	5.7	45	25
Do. ¹	41°30'12"	71°36'32"	July 28, 1924	—	.20	7.2	—	—	2.2	1.1	3.9	1.0	9.8	6.8	3.5	.5	32	10	2	—	6.6	—	18
Do.	do.	do.	Mar. 21, 1951	—	.15	15	—	—	2.8	.7	—	—	6.1	4.8	8.0	.0	46	10	5	—	5.3	—	70
Un-named brook	41°32'47"	71°33'11"	Oct. 8, 1958	.25	.43	—	.02	.06	—	—	—	—	10	—	—	—	109	45	—	126	6.4	51	45
Do.	do.	do.	Apr. 7, 1959	.00	.30	—	.01	.06	—	—	—	—	4	—	—	—	48	19	—	68	5.4	53.5	20
Usquepaug River	41°28'35"	71°36'20"	Oct. 8, 1958	.30	.31	—	.00	.00	—	—	—	—	4	—	—	—	45	11	—	44	6.0	52	55
Do.	do.	do.	Apr. 7, 1959	.00	.18	—	.01	.02	—	—	—	—	4	—	—	—	34	12	—	39	5.7	49.7	25
White Horn Brook	41°27'46"	71°33'18"	Oct. 8, 1958	.20	.31	—	.00	.00	—	—	—	—	10	—	—	—	72	20	—	85	6.2	52	80
Do.	do.	do.	Apr. 7, 1959	.09	.28	—	.00	.04	—	—	—	—	8	—	—	3.7	58	18	—	74	5.7	49.5	50

¹ Analysis made by Rhode Island Division of Sanitary Engineering.

Table 11. — Chemical analyses of ground water

(Analyses by U.S. Geological Survey, Albany, N.Y., and Washington, D.C., unless otherwise indicated)

Well no.	Sampling depth (feet below lsd)	Date of collection	Silica (SiO ₂)	Iron		Manganese		Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Dissolved solids (residue on evapo- ration at 180°C)	Total hard- ness (CaCO ₃)	Non-carbonate hardness	Specific conductance (micromhos at 25°C)	pH	Temperature (°F)	
				Dissolved	Total	Dissolved	Total																
Parts per million																							
BEDROCK																							
Sok 3	20-600	June 12, 1924	12	—	—	—	14	3.8	—	—	—	23	9.7	20	0.0	2.0	100	51	32	—	—	7.2	—
108	15-112	do.	17	—	—	—	34	6.0	15	4.7	77	29	21	—	—	24	203	110	47	—	—	6.8	—
108	do.	Apr. 22, 1925	9.0	—	—	—	37	7.0	18	3.5	95	30	23	—	—	23	216	121	43	—	—	6.9	—
OUTWASH																							
Exe 8	16.2-17.0	Apr. 15, 1946	—	—	—	—	—	—	—	—	—	8.5	—	7.5	—	1.8	44	22	15	—	—	5.9	—
10-21	at 40	Apr. 23, 1924	10	—	—	—	2.3	1.2	3.5	.4	11	4.1	3.8	—	—	1.0	33	11	2	—	—	6.7	—
26 ¹	3-10	Dec. 22, 1941	—	—	—	—	—	—	—	—	—	17	—	5.0	—	.4	70	86	72	—	—	5.8	—
33 ¹	36-48	Dec. 6, 1948	12	—	—	—	8.0	2.4	1.6	—	9.8	6.1	11	.0	.0	3.1	53	30	22	—	—	6.8	51
39 ¹	35-55	Apr. 18, 1955	—	—	—	—	—	—	—	—	—	8.5	—	—	—	—	40	14	7	—	—	5.6	—
200	Spring	Sept. 21, 1959	—	0.03	.25	.15	—	—	—	—	—	15	—	8.0	.0	13	45	20	—	—	54	5.9	53
401 ¹	9.6-30.4, 35.0-71.0	Feb. 16, 1960	—	—	—	—	—	—	—	—	—	11	—	—	—	—	48	13	4	—	—	7.2	47
402	17.0-86.6	Jan. 6, 1960	—	.01	.07	.00	—	—	—	—	—	17	—	—	—	—	41	17	—	—	60	6.6	50
402	do.	Jan. 7, 1960	—	.02	.04	.00	—	—	—	—	26	—	—	—	—	—	64	22	—	—	74	6.3	50
Nok 123	at 47.5	Feb. 3, 1954	9.2	—	.88	—	2.4	1.9	6.0	.3	11	7.6	7.8	.0	.7	3.0	44	15	6	—	—	5.9	—
Sok 81 ¹	45-75	Dec. 6, 1948	13	—	—	—	10	2.5	—	—	9	9.9	13	.1	.1	3.0	80	35	28	—	—	6.8	51
84 ¹	33.6-59.0	Jan. 17, 1949	12	—	—	—	10	1.8	—	—	6	11	8.0	.0	.0	.2	39	32	27	—	—	6.0	50.5
91 ¹	34-54	July 19, 1954	—	—	—	—	—	—	—	—	—	11	—	12	.0	.7	—	22	15	—	—	5.6	—
92	111-131	Feb. 3, 1954	18	—	.11	.02	9.2	2.6	8.7	1.3	35	13	8.7	.4	1.3	86	34	5	—	—	114	6.8	51
105 ¹	at 165	Jan. 27, 1955	16	—	.25	.00	6.8	2.0	—	—	34	4.6	5.0	.8	.0	64	26	0	—	—	—	7.0	50
315 ¹	at 80	Jan. 4, 1955	4.0	—	.15	.00	5.6	1.3	—	—	11	31	7.0	.0	4.4	44	20	11	—	—	—	6.4	50
480	14.1-18.6	Sept. 22, 1959	—	.00	.14	.04	—	—	—	—	29	—	—	—	—	58	32	8	—	—	88	6.4	55
493	4.4-9.4	do.	—	.01	.09	.08	—	—	—	—	120	—	—	—	—	150	109	11	11	248	7.2	57	
512 ¹	18.4-22.7	Jan. 27, 1955	8.0	—	.00	.00	20	3.4	—	—	17	44	7.0	.0	4.4	118	65	51	—	—	—	6.5	53
562	16-20	Sept. 22, 1959	—	.01	.10	.03	—	—	—	—	11	—	—	—	—	64	27	—	—	—	93	5.7	54.5
582	8.4-16.9	do.	—	2.03	.10	.00	—	—	—	—	16	—	—	—	—	53	16	—	—	—	60	6.3	55
647	16.2-19.2	do.	—	.01	.18	.02	—	—	—	—	14	—	—	—	—	49	21	10	—	—	69	6.0	55
887 ¹	36-51	Aug. 3, 1959	—	—	.00	.00	—	—	—	—	—	—	—	6.0	—	1.0	55	13	4	—	—	5.6	—
887 ¹	do.	Nov. 16, 1959	—	—	.00	.00	—	—	—	—	—	—	—	5.0	—	.0	43	10	4	—	—	5.8	—
888 ¹	113-138	July 15, 1960	—	—	2.0	.33	—	—	—	—	—	7.3	—	11	—	.0	—	—	—	—	—	7.0	—
905 ¹	55.4-76.0	Dec. 2, 1959	—	—	.00	.00	—	—	—	—	—	9.8	—	—	—	—	40	11	3	—	—	7.2	50

Table 11. — Chemical analyses of ground water — Continued
(Analyses by U.S. Geological Survey, Albany, N.Y., and Washington, D.C., unless otherwise indicated)

Parts per million																							
Well no.	Sampling depth (feet below LSD.)	Date of collection	Iron (Fe)		Manganese (Mn)		Silica (SiO ₂)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Dissolved solids (residue on evapo- ration at 180°C)	Total hard- ness (CaCO ₃)	Non-carbonate hardness	Specific conductance (micromhos at 25°C)	pH	Temperature (°F)	
			Dissolved	Total	Dissolved	Total																	
OUTWASH — Continued																							
Sok 905 ¹	13.0-37.1, 55.4-76.0	Dec. 4, 1959	—	0.00	—	0.00	—	—	—	—	—	8.5	—	—	—	—	40	14	7	—	7.2	51	
905	do.	Dec. 8, 1959 12:05 a.m.	0.02	.06	0.00	.00	—	—	—	—	—	8	—	—	—	—	46	15	—	—	5.8	50.5	
905	do.	Dec. 8, 1959 10:06 a.m.	.01	.06	.00	.00	—	—	—	—	—	9	—	—	—	—	38	14	—	—	6.2	50.5	
906 ¹	10.9-50.8	Dec. 14, 1959	—	.00	—	.00	—	—	—	—	—	7.3	—	—	—	—	113	48	42	—	6.9	52	
906	do.	Dec. 15, 1959	.00	.08	.01	.02	—	—	—	—	—	24	—	—	—	—	128	63	—	—	6.2	51	
906	do.	Dec. 16, 1959	.00	.07	.00	.02	—	—	—	—	—	26	—	—	—	—	124	62	—	—	6.2	51	
907	124.2-175.6	Jan. 22, 1960	.03	4.5	.14	.16	—	—	—	—	—	19	—	—	—	—	56	15	—	—	6.2	51	
907	10.2-61.9	Jan. 26, 1960	.02	1.2	.04	.06	—	—	—	—	—	22	—	—	—	—	101	48	—	—	6.2	52	
907	do.	Jan. 28, 1960	.02	1.8	.02	.05	—	—	—	—	—	16	—	—	—	—	89	37	—	—	6.0	52	
907 ¹	do.	Jan. 29, 1960	—	.05	—	.00	—	—	—	—	—	13	—	—	—	—	121	47	36	—	7.1	52	
908	18.4-70.2	Dec. 29, 1959	.03	.07	.00	—	—	—	—	—	—	16	—	—	—	—	44	13	—	—	6.4	49	
908	do.	Dec. 30, 1959	.03	.06	.00	.00	—	—	—	—	—	6	—	—	—	—	20	6	—	—	5.9	49	
1024 ¹	at 65	Aug. 16, 1960	—	.02	—	.05	—	—	—	—	—	17	—	7.0	0.2	3.5	—	20	6	6	—	6.0	—
1040 ¹	4.5-65.0	Oct. 28, 1960	—	.00	—	.10	—	—	—	—	—	13	—	10	.2	8.9	76	34	23	—	5.8	53	
WWgr 213	6.1-14.4	Sept. 21, 1959	.01	.81	.00	.01	—	—	—	—	—	16	—	—	—	—	33	18	—	—	6.0	52.5	
TILL																							
Exe 260	12.6-19.2	Sept. 21, 1959	.02	.19	.00	.08	—	—	—	—	—	14	—	—	—	—	62	24	—	—	103	5.8	53
279	Spring	do.	.05	.13	.00	.00	—	—	—	—	—	16	—	—	—	—	44	18	—	—	62	6.0	50.5
330	11.0-15.1	Sept. 22, 1959	.02	.16	.02	.05	—	—	—	—	—	13	—	—	—	—	52	14	—	—	57	5.7	55
Ric 163	Spring	Sept. 21, 1959	.01	.03	.00	.02	—	—	—	—	—	12	—	—	—	—	43	13	3	—	49	5.8	55
Sok 8	do.	Apr. 22, 1925	—	.02	—	—	2.7	1.5	4.2	0.4	9	7.6	4.7	—	—	1.1	33	13	6	—	—	7.4	—
8 ¹	do.	Oct. 18, 1954	—	.10	—	—	—	—	—	—	—	16	—	5.0	.0	.6	31	22	9	—	—	5.8	—
623	11.0-20.1	Sept. 22, 1959	.02	.07	.05	.06	—	—	—	—	—	30	—	—	—	—	226	130	—	—	327	6.2	55
MIXED TILL AND OUTWASH																							
167 ¹	at 95	Jan. 27, 1955	—	.00	—	.00	17	2.5	—	—	—	50	20	8.0	.0	2.2	102	53	12	—	—	6.2	57
904	at 20	Sept. 22, 1959	.02	.16	.02	.02	—	—	—	—	—	10	—	—	—	—	40	16	—	—	62	5.9	55

¹Analysis made by Rhode Island Division of Sanitary Engineering.

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Table 12. — Records of selected wells

Well no.: For explanation of well-numbering system, see text p. 6.

Altitude above mean sea level: Altitudes of land surface determined by spirit leveling are given in feet and hundredths; altitudes of land surface determined by aneroid barometer or interpolated from topographic maps are given in feet.

Type of well: Dr, drilled; Dn, driven; Du, dug; Je, jetted.

Depth of well: Measured depths below land surface are given in feet and tenths; reported depths are given in feet.

Water level: Measured water levels are given in feet, tenths, and hundredths of a foot; reported water levels are given in feet.

Water-bearing material: O, outwash; R, bedrock; T, till.
Use: A, abandoned; D, domestic; O, observation; PS, public supply; S, stock; T, test.

Remarks: A, pumping test data given in figure 2; C, chemical analyses given in table 11; P, physical properties of unconsolidated deposits and logs of wells given in table 1; W, water-level measurements given in tables 5 and 6.

Well no.	Location		Owner	Altitude above mean sea level (feet)	Type of well	Depth of well (feet)	Diameter (inches)	Depth to bedrock (feet below land surface)	Date of measurement	Water			Use	Remarks	
	Latitude	Longitude								Level (feet below land surface)	Yield (gpm)	Temperature (°F)			Water-bearing material
TOWN OF CHARLESTOWN															
Cha 91	41°25'09"	71°36'59"	W. A. Amann	114.64	Du	18.6	48	—	Mar. 5, 1958	9.63	—	53	T	O	W
Cha 98	41°26'05"	71°36'34"	P. J. Printz	200	Du	18.8	30	18.8	Nov. 2, 1954	12.82	—	—	T	D	W
Cha 100	41°26'33"	71°36'37"	H. E. Lampheire	190.50	Du	28.2	36	28.2	Feb. 7, 1957	24.25	—	51	T	D,O	W
Cha 101	41°26'47"	71°36'52"	C. C. Webster	145	Du	26.8	30	—	Nov. 2, 1954	21.24	—	—	T	D	
Cha 332	41°26'57"	71°36'59"	U.S. Geol. Survey	90	Dn,Dr	29.0	4 1/2	16.0	Sept. 30, 1958	.21	—	53	O,T,R	T	P, porosity 37.4%, specific yield 27.3%
Cha 333	41°24'52"	71°36'30"	do.	105	Dn,Dr	62.1	2 1/2	49.8	Dec. 23, 1958	3.20	—	44	O,T,R	T	P
TOWN OF EXETER															
Exe 8	41°33'07"	71°32'37"	State of Rhode Island	153	Du	17.0	30	—	July 9, 1946	12.20	56	—	O	A	C
Exe 10-21	41°33'07"	71°32'37"	do.	155	Dn	40±	2 1/2	—	—	—	—	—	O	A	C
Exe 16	41°33'07"	71°32'37"	do.	154.47	Dn	27.0	2 1/2	—	Aug. 19, 1959	12.23	—	—	O	O	W
Exe 26	41°32'54"	71°32'16"	do.	144	Du	9	240	—	June, 1946	3	250	—	O	A	C
Exe 27	41°33'02"	71°34'03"	L. King & C. LaFarge	210	Du	20	30	—	do.	18	—	—	T	D	
Exe 30	41°34'04"	71°32'53"	A. S. Brownell	170.17	Du	10.7	30	—	Aug. 19, 1959	9.05	—	—	O	O	W
Exe 31	41°33'55"	71°32'51"	E. E. Pierce	158	Du	8.3	30	—	Aug. 9, 1946	5.49	—	—	O	A	
Exe 32	41°34'34"	71°33'04"	L. A. Records	215	Dr	71	6	15	July 9, 1946	11.51	—	—	R	D,S	
Exe 33	41°33'04"	71°32'37"	State of Rhode Island	152	Dr	48	12	—	Aug. 29, 1947	10.55	260	52	O	PS	C,P
Exe 34	41°33'00"	71°32'45"	do.	155	Dr	102	8	96	Dec. 6, 1946	11.85	20	—	O,R	T	P
Exe 38	41°33'24"	71°32'47"	do.	144	Dr	48.5	8	47	Jan., 1947	10	—	—	O,R	T	P
Exe 39	41°33'27"	71°32'54"	do.	140	Dr	55	12	65	May 13, 1947	6.15	350	49	O,T,R	PS	C,P
Exe 42	41°32'27"	71°31'16"	Baptist Camps of R.I., Inc.	149	Dr	30	6	38 1/2	Mar., 1950	13	30	50	O	PS	
Exe 43	41°32'40"	71°31'28"	do.	169.02	Du	36	30	—	Aug. 19, 1959	30.03	—	—	O	O,PS	W
Exe 46	41°30'58"	71°30'50"	H. Kenyon	200	Dr	260	6	40	Aug., 1952	25	—	—	R	D,S	
Exe 47	41°30'26"	71°30'39"	A. Rankine	230	Du	22.7	24	—	Aug. 4, 1952	14.3	—	—	T	D	
Exe 49	41°30'52"	71°30'50"	D. L. Duncan	205	Du	19.9	24	—	July 29, 1952	14.8	—	—	T	D,S	

Exe 50	41°32'43"	71°31'42"	J. T. Gardner	170	Dr	101	8	80	—	30	28	—	R	D
Exe 51	41°32'45"	71°31'35"	A. E. Albert	165	Dr	200	8	80	—	—	40	—	R	D
Exe 53	41°33'06"	71°32'06"	F. Palmer	175	Du	23.6	30	—	—	20.2	—	—	O	D
Exe 54	41°33'00"	71°32'05"	R. B. Palmer	170	Dr	131	8	70	—	26	4½	—	R	D
Exe 57	41°31'22"	71°33'17"	E. R. Burling	215	Dr	80	6	30	—	24	5	—	R	D
Exe 59	41°32'00"	71°32'49"	G. Poyton	195	Dr	110	6	20	—	12	20	—	R	D
Exe 60	41°31'59"	71°32'54"	State of Rhode Island	179	Dr	26	6	—	—	—	50	50	O	PS
Exe 63	41°30'40"	71°33'20"	E. J. Moon	209.13	Du	11.5	24	—	—	11.00	—	—	O	O
Exe 64	41°31'40"	71°31'30"	J. H. Hanks	220	Du	17.0	30	—	—	13.1	—	—	T	D
Exe 65	41°33'30"	71°32'10"	W. A. Battier	205	Du	14.5	30	14.5	—	10.3	—	—	T	D
Exe 74	41°34'36"	71°32'08"	J. B. Brooks	285	Dr	258	6	60	—	18	7	—	R	D
Exe 82	41°34'44"	71°32'37"	D. E. Slocum	200	Dr	50	6	20	—	—	25	—	R	D
Exe 83	41°34'38"	71°32'43"	G. Helliwell	205	Dr	50	6	17	—	17	30	—	R	D,S
Exe 86	41°33'42"	71°31'23"	E. Schartner	197.27	Du	34	30	—	—	23.48	—	—	O	O
Exe 93	41°34'47"	71°33'15"	A. Brown	290	Du	23	30	23	—	16.5	—	—	T	D
Exe 200	41°31'11"	71°34'36"	J. A. Woodmansee	130	—	—	—	—	—	—	—	57	O	D
Exe 202	41°31'27"	71°34'18"	M. Eppley	129.15	Du	9	36	—	—	4.82	—	—	O	O
Exe 203	41°32'04"	71°33'11"	L. D. Lepez	245	Dr	75	8	24	—	20	20	—	R	D
Exe 205	41°32'24"	71°34'33"	E. Knight	160	Du	19.9	30	—	—	17.01	—	—	O	D
Exe 206	41°32'18"	71°35'13"	E. Brown	160	Du	11.7	30	—	—	9.45	—	—	O	D,S
Exe 207	41°32'15"	71°35'19"	S. MacDonald	170	Dr	160	6	30	—	30	—	—	R	D,S
Exe 209	41°32'18"	71°35'30"	H. Edgar	180	Du	8.2	30	—	—	7.44	—	—	T	D
Exe 213	41°31'42"	71°35'38"	M. V. Hoxsie	195	Du	18	30	18	—	12	—	—	T	D
Exe 215	41°31'42"	71°35'54"	H. Gabitt	250	Du	13.3	36	13.3	—	9.68	—	—	T	D
Exe 216	41°30'58"	71°34'37"	R. Halliwell	124	Du	7.3	36	—	—	5.36	—	—	O	D
Exe 217	41°32'01"	71°35'42"	J. B. Brown	280	Du	21.1	30	21.1	—	20.1	—	—	T	D
Exe 218	41°32'26"	71°36'36"	W. T. Sherman	350	Du	22.5	30	22.5	—	16.16	—	—	T	D,S
Exe 219	41°32'32"	71°36'24"	H. Brown	338.34	Du	10.1	30	—	—	3.60	—	—	T	O
Exe 220	41°32'46"	71°34'57"	Warwick Sportsman's Assoc.	185.53	Du	22.2	36	22.2	—	13.91	—	52	T	O
Exe 221	41°32'31"	71°35'22"	G. P. Metcalf	180	Dr	226	6	28	—	6	50	—	R	D
Exe 223	41°32'32"	71°35'15"	do.	190	Du	20.2	36	—	—	14.77	—	—	T	A
Exe 225	41°33'20"	71°36'11"	do.	260	Du	11.8	48	—	—	3.45	22	—	T	D,S
Exe 226	41°32'52"	71°34'33"	E. Peck	165	Du	12.6	30	12.6	—	10.99	—	57	O	D
Exe 227	41°33'28"	71°34'11"	C. V. Knight	255	Du	34.6	30	34.6	—	29.1	—	52	T	A
Exe 229	41°33'40"	71°34'54"	L. E. Peck	245	Du	19.6	30	19.6	—	18.17	—	—	T	D,S
Exe 230	41°33'09"	71°35'38"	G. P. Metcalf	285	Du	19.1	30	—	—	10.43	—	58	T	A
Exe 232	41°32'44"	71°37'00"	K. A. Gardiner	410.96	Du	28.5	30	28.5	—	9.67	—	49	T	D,O
Exe 234	41°34'43"	71°37'20"	B. J. Oatley	525	Du	17.5	36	5.5	—	—	—	—	R	A
Exe 237	41°34'40"	71°36'12"	L. Whitford	365	Du	24.3	30	24.3	—	18.2	—	—	T	D
Exe 238	41°34'00"	71°36'31"	I. & J. Tefft	333.80	Du	14.4	24	—	—	13.43	—	—	T	D,O
Exe 239	41°33'35"	71°36'23"	L. Joslin	300	Du	14	30	—	—	13.02	—	—	T	D
Exe 241	41°33'25"	71°36'35"	G. P. Metcalf	330	Du	11.4	24	—	—	10.23	—	53	T	D
Exe 243	41°33'52"	71°34'31"	Sebowish Lodge	230	Du	15.7	30	—	—	11.63	—	53	T	A
Exe 247	41°34'07"	71°35'14"	C. Barnes	260	Du	15.9	36	—	—	13.02	—	—	T	D
Exe 248	41°34'05"	71°34'27"	J. Reynolds	225.19	Du	16.1	24	16.1	—	15.11	—	53	T	D,O
Exe 250	41°34'13"	71°34'19"	W. R. Laporte	220	Dr	99	6	19	—	17	½	—	R	D
Exe 251	41°34'24"	71°34'20"	J. Hathaway	210	Du	11.6	36	—	—	9.58	—	—	O	D

Table 12. — Records of selected wells — Continued

Well no.	Location		Owner	Water										Remarks	
	Latitude	Longitude		Altitude above mean sea level (feet)	Type of well	Depth of well (feet)	Diameter (inches)	Depth to bedrock (feet below land surface)	Date of measurement	Level (feet below land surface)	Yield (gpm)	Temperature (°F)	Water-bearing material		Use
TOWN OF EXETER—Continued															
Exe 252	41°34'30"	71°34'22"	C. Brewer	230	Dr	58	6	17	1947	—	1	—	R	D	
Exe 253	41°34'48"	71°35'59"	W. Greene	350	Dr	44.5	6	12	July 29, 1954	21.72	5	—	R	D	
Exe 254	41°34'45"	71°35'36"	E. Adams	355	Du	18.7	40	—	do.	16.8	—	—	T	D	
Exe 256	41°34'45"	71°35'24"	J. Lang	370	Dr	57	6	17	1946	18	4	—	R	D	
Exe 258	41°34'47"	71°35'10"	W. W. Foster	320	Du	20	30	20	July, 1954	18	—	—	T	D	
Exe 260	41°34'47"	71°34'43"	F. E. Dutemple	295	Du	19.2	30	19.2	July 29, 1954	11.62	—	54	T	A	C
Exe 261	41°34'48"	71°34'26"	O. Joslin	240	Dr	25	6	5	1943	5	2	—	R	D	
Exe 262	41°31'14"	71°35'19"	M. Eppley	126.72	Du	12.6	30	—	Aug. 20, 1959	10.92	—	—	O	O	W
Exe 263	41°31'44"	71°36'48"	Tillinghast Farm	283.11	Du	14.5	40	—	June 12, 1957	10.69	—	52	T	O	W
Exe 264	41°30'39"	71°33'23"	G. Rathbun	188.47	Du	14.0	36	—	Nov. 14, 1956	12.38	—	52	O	O	W
Exe 265	41°30'38"	71°33'10"	R. K. Goodwin	245	Dr	82	6	20	Sept. 1953	20	4	—	R	D	
Exe 266	41°30'31"	71°32'29"	J. Coutu	170	Dr	42	6	18	July, 1950	14	8	—	R	D	
Exe 267	41°30'23"	71°31'56"	A. Brown	102.01	Du	6.5	36	—	Aug. 19, 1959	4.93	—	58	O	O	W
Exe 271	41°30'33"	71°31'25"	D. Gardner	150	Du	10.6	30	10.6	Aug. 9, 1954	9.04	—	57	T	D,S	
Exe 272	41°31'04"	71°31'22"	W. Tucker	135	Du	28.4	30	—	do.	25.21	—	50	O	A	
Exe 273	41°31'00"	71°31'15"	Yawgoo School	135	Dr	25.0	2	—	do.	16.98	—	—	O	A	
Exe 274	41°31'03"	71°31'33"	E. Babbitt	110	Du	5.4	20	—	do.	4.08	—	60	O	D	
Exe 275	41°30'57"	71°31'37"	M. Babbitt	125	Du	23.1	48	—	do.	20.29	—	52	O	D	
Exe 277	41°31'15"	71°31'28"	H. F. Dunbar	125	Du	19.2	36	19.2	do.	15.59	—	58	O	D	
Exe 278	41°31'35"	71°31'42"	F. Brown	230.90	Du	23.9	24	23.9	Nov. 2, 1956	22.26	—	51	T	O	W
Exe 279	41°31'46"	71°31'55"	G. Brandt	165	—	3.5	—	3.5	Aug. 12, 1954	—	—	52	T	D	C, spring
Exe 281	41°31'32"	71°33'08"	L. Tower	219.40	Du	16.0	24	16.0	July 24, 1957	14.22	—	54	O	D,O	W
Exe 282	41°30'56"	71°33'26"	W. Allen	200	Du	9.8	36	9.8	Aug. 16, 1954	9.20	—	56	O	D	
Exe 283	41°31'03"	71°32'52"	H. Jones	240	Du	19.0	30	19.0	do.	15.89	—	53	T	A	
Exe 288	41°31'15"	71°33'47"	M. Wells	200	Du	14.9	30	14.9	Aug. 17, 1954	12.73	—	52	O	D	
Exe 291	41°31'12"	71°33'17"	B. C. Coldwell	215	Du	8.8	30	—	do.	3.64	—	60	O	D	
Exe 292	41°31'25"	71°33'13"	R. Woodmansee	215	Du	9.0	36	—	do.	4.1	—	62	O	D	
Exe 295	41°32'32"	71°32'10"	W. Crandall	160	Du	15.8	36	15.8	Aug. 18, 1954	10.39	—	57	T	D	
Exe 298	41°33'23"	71°31'16"	W. Murphy	190	Dr	100	6	40	Nov., 1950	19	6	—	R	D	
Exe 299	41°33'27"	71°31'19"	H. Winkler	185	Du	16.8	40	—	Aug. 18, 1954	10.19	—	55	O	D	
Exe 302	41°34'48"	71°34'01"	J. H. Crooker	185	Du	14.2	40	—	Aug. 19, 1954	9.6	—	—	O	D	
Exe 303	41°34'53"	71°33'35"	Exeter Grange No. 12	325	Dr	106	6	15	1950	25	15	51	R	PS	
Exe 306	41°34'41"	71°32'31"	B. Knapp	195	Du	14.0	24	—	Aug. 19, 1954	9.61	—	58	O	D	
Exe 307	41°34'32"	71°31'30"	G. Thomas	214.15	Du	34.8	36	34.8	Oct. 25, 1956	33.30	—	51	O	D,O	W
Exe 308	41°34'52"	71°33'48"	A. Ellis	260	Dr	60	6	20	—	—	—	—	R	D	
Exe 309	41°34'29"	71°33'17"	L. A. Records, Jr.	275	Dr	56	6	14	1951	17	5	—	R	D	

Exe 310	41°33'51"	71°33'53"	E. Bell	154.01	Du	11.2	40	—	Aug. 19, 1959	8.23	—	61	O	D,O	W
Exe 311	41°33'49"	71°34'00"	G. Hathaway	193	Du	32.6	36	—	Aug. 20, 1954	30.36	—	—	O	D,S	
Exe 313	41°33'55"	71°32'13"	J. Caldwell	240	Du	12.6	36	—	do.	7.09	—	61	T	D	
Exe 315	41°34'11"	71°32'14"	T. Hopkins	250.94	Du	18.6	36	18.6	June 11, 1958	2.96	—	59	T	D,O	W
Exe 316	41°33'39"	71°32'09"	C. P. Hollstein	215	Du	18.0	30	—	Aug. 20, 1954	9.05	—	56	T	D	
Exe 318	41°32'51"	71°31'56"	Exeter Town Farm	171	Du	26.4	36	—	do.	22.1	—	—	O	D	
Exe 322	41°31'18"	71°35'21"	M. Eppley	125	Dr	122	6	—	1940	25	2	—	O	D	
Exe 323	41°31'56"	71°35'26"	do.	185	Du	15.5	36	15.5	Aug. 26, 1954	12.00	—	53	T	A	
Exe 326	41°35'13"	71°32'24"	H. J. Ahlborg	265	Du	15.4	36	—	Sept. 10, 1954	9.28	—	55	T	D	
Exe 329	41°35'37"	71°32'41"	I. C. Nichols	295	Du	10.2	24	10.2	do.	7.64	—	59	T	D	
Exe 330	41°35'47"	71°32'38"	Uneeda Rest Camp	315	Du	15.1	—	—	do.	11.05	—	56	T	D	C
Exe 332	41°35'21"	71°33'37"	T. S. Rose	394.17	Du	22.9	36	—	Sept. 5, 1956	16.25	—	54	T	D,O	W
Exe 333	41°35'07"	71°34'40"	R. W. Brown	275	Du	13.3	24	13.3	Sept. 13, 1954	6.27	—	—	T	A	
Exe 334	41°35'22"	71°33'46"	P. J. Rose	420	Du	21.3	24	—	Sept. 14, 1954	7.98	—	57	T	D,S	
Exe 335	41°35'16"	71°34'49"	R.I. Coon Hunters' Assoc.	289.37	Du	9.7	36	9.7	July 25, 1956	7.63	—	61	T	O	W
Exe 336	41°34'55"	71°34'50"	R. Brown	320	Du	16.0	36	11	Sept. 15, 1954	10.36	—	58	T,R	D,S	
Exe 337	41°35'57"	71°34'30"	G. A. Matteson	285	Du	12.1	30	12.1	Sept. 16, 1954	4.12	—	57	T	A	
Exe 339	41°35'21"	71°35'37"	E. Whitford	385	Du	23.8	30	23.8	Sept. 17, 1954	10.84	—	56	T	D	
Exe 346	41°35'08"	71°35'10"	R. H. Saunders	335	Dr	99	6	17	Oct., 1953	20	6	53	R	D	
Exe 347	41°33'38"	71°32'38"	State of Rhode Island	179.86	Du	36.8	36	—	Aug. 23, 1959	32.14	—	—	O	O	W
Exe 363	41°33'14"	71°32'54"	do.	145	Dn	30	2½	—	Jan. 31, 1957	12.40	—	—	O	T	
Exe 385	41°31'41"	71°34'32"	U.S. Geol. Survey	145	Dn	88.3	2½	88.3 ¹	Jan. 13, 1958	24.81	—	49	O	T	P. porosity 25.6%, specific yield 24.9%
Exe 387	41°32'19"	71°34'09"	do.	122	Dn	69	2½	69	Jan. 2, 1958	.39	—	56	O	T	Porosity 29.1%, specific yield 27.9%
Exe 388	41°31'22"	71°31'01"	do.	128	Dn	129.8	2½	129.8 ¹	do.	14.34	—	52	O,T	T	P
Exe 389	41°30'23"	71°31'55"	do.	102	Dn	102.8	2½	(1)	Jan. 8, 1958	3.28	—	50	O,T	T	P
Exe 390	41°32'17"	71°34'05"	do.	124.40	Dn	9.4	1½	—	Apr. 30, 1958	2.27	—	—	O	O	W
Exe 391	41°32'45"	71°33'16"	do.	142.02	Dn	8.8	1½	—	Sept. 2, 1959	7.15	—	—	O	O	W
Exe 392	41°33'05"	71°32'04"	do.	153	Dn,Dr	48.7	2½	38.7	Dec. 22, 1958	6.18	—	48	O,T,R	T	P
Exe 393	41°32'55"	71°33'41"	do.	132	Dn,Dr	68.2	2½	58.2	Nov. 26, 1958	1.71	—	46	O,T,R	T	P
Exe 394	41°33'55"	71°33'52"	do.	158	Dn,Dr	48.3	2½	37.0	Dec. 18, 1958	12.50	—	49	O,T,R	T	P
Exe 395	41°33'15"	71°31'24"	do.	185	Dn,Dr	34.2	2½	23.0	Jan. 5, 1959	6.93	—	—	O,T,R	T	P
Exe 396	41°32'15"	71°34'01"	do.	131	Je	22.1	2	—	Sept. 8, 1959	10.23	—	—	O	O	W
Exe 397	41°30'25"	71°31'59"	do.	100	Je	13.4	2	—	May 24, 1960	1.29	—	—	O	O	W
Exe 398	41°32'51"	71°33'32"	do.	158	Je	30.8	2	—	Sept. 8, 1959	25.61	—	—	O	O	W
Exe 399	41°32'19"	71°34'09"	do.	121	Dn	11.5	2	—	May 31, 1960	2.45	—	—	O	O	W
Exe 400	41°32'15"	71°34'01"	do.	134	Dr	60.2	8	—	Jan. 12, 1960	9.09	60	49	O,T	T	P
Exe 401	41°32'19"	71°34'09"	do.	124	Dr	72.0	8	—	Feb. 15, 1960	1.57	410	49	O,T	T	A,C,P
Exe 402	41°30'25"	71°31'59"	do.	100	Dr	89.8	8	—	Jan. 6, 1960	1.04	610	50	O,T	T	A,C,P
Exe 404	41°35'44"	71°34'45"	do.	220	Du	5.2	12	—	May 22, 1959	9.2	—	—	O	T	Porosity 26.4%, specific yield 22.6%
Exe 405	41°33'44"	71°32'54"	do.	149	Du	1.8	12	—	do.	1.8	—	—	O	T	Porosity 29.2%, specific yield 25.1%
Exe 406	41°32'45"	71°33'16"	do.	140	Du	4.5	12	—	do.	4.5	—	—	O	T	Porosity 34.0%, specific yield 26.8%
Exe 407	41°31'24"	71°33'14"	do.	215	Du	3.0	12	—	do.	3.0	—	—	O	T	Porosity 42.5%, specific yield 24.9%

Table 12. Records of selected wells—Continued

Well no.	Location		Owner	Altitude above mean sea level (feet)	Type of well	Depth of well (feet)	Diameter (inches)	Depth to bedrock (feet below land surface)	Date of measurement	Water			Use	Remarks
	Latitude	Longitude								Level (feet below land surface)	Yield (gpm)	Temperature (°F)		
TOWN OF EXETER—Continued														
Exc 408	41°32'27"	71°36'33"	do.	332	Du	3.6	12	—	May 27, 1959	1.5	—	—	T	Porosity 30.7%, specific yield 8.9%
Exc 409	41°31'54"	71°32'18"	do.	210	Du	2.9	12	—	do.	2.9	—	—	T	Porosity 22.8%, specific yield 8.1%
Exc 410	41°35'37"	71°32'36"	do.	283	Du	1.1	12	—	do.	1.1	—	—	T	Porosity 26.1%, specific yield 14.2%
TOWN OF NORTH KINGSTOWN														
Nok 79	41°32'33"	71°30'28"	J. Nye	162	Du,Dn	73	2½	—	1942	56	15	56	O	D
Nok 115	41°31'47"	71°31'02"	H. B. Tarbox	146	Du	25.0	30	—	Oct. 8, 1959	23.96	—	—	O	D
Nok 116	41°31'23"	71°31'01"	H. J. Huling	125	Du	9.9	30	—	do.	5.95	—	—	O	D
Nok 117	41°31'19"	71°30'56"	H. G. Reinhardt	131	Du	23.4	30	—	do.	15.98	—	—	O	D
Nok 119	41°32'10"	71°30'38"	B. H. Brow	150	Dr	157	8	100	1927	—	30	—	R	D,S
Nok 120	41°31'56"	71°30'53"	do.	150	Dr	225	6	100	1935	—	2½	—	R	D
Nok 122	41°32'00"	71°30'19"	B. J. Hutchins	152	Dr	140	6	60	Aug., 1952	20	—	—	R	D
Nok 123	41°32'08"	71°30'56"	C. H. Johnson	145	Dr	47.5	6	—	Feb. 3, 1954	—	—	53	O	D
Nok 128	41°32'39"	71°30'57"	J. T. Gardner	156	Du	15.3	30	—	Aug. 5, 1952	11.1	—	—	O	D
Nok 152	41°32'22"	71°30'22"	J. E. Mathewson	162	Dr	100	6	—	Oct. 8, 1959	57.19	—	—	R	D,S
Nok 252	41°32'16"	71°29'54"	W. E. Jordan	160	Dn	66	3	—	—	50	4	—	O	D
Nok 267	41°32'31"	71°28'57"	N. Porter	85	Dr	150	6	75	—	—	—	—	R	D,S
Nok 543	41°32'48"	71°29'56"	C. F. Sweet	170	Dr	96	6	—	Apr. 7, 1949	72	15	—	O	A
Nok 670	41°31'40"	71°31'06"	H. B. Tarbox	136	Du	21.7	36	—	Oct. 8, 1959	18.20	—	52	O	D
Nok 671	41°31'37"	71°31'05"	R. G. Haslam	137	Du	20.5	36	—	do.	17.11	—	—	O	D
Nok 672	41°31'42"	71°31'04"	North Kingstown Grange	138	Du	22.6	36	—	do.	20.52	—	53	O	PS
Nok 673	41°31'54"	71°30'47"	B. H. Brow	149	Du	32.9	40	—	do.	30.35	—	—	O	D
Nok 675	41°31'55"	71°30'39"	do.	146.26	Du	28.7	36	—	Aug. 19, 1959	26.59	—	—	O	O
Nok 676	41°31'36"	71°30'07"	H. W. Tucker	141	Du	17.6	36	—	Aug. 12, 1954	7.13	25	—	O	A
Nok 677	41°31'52"	71°31'07"	W. H. Wood	125	Du	7.8	40	—	do.	5.53	—	56	O	D
Nok 679	41°32'22"	71°30'20"	B. H. Brow	165	Du	57.2	36	—	Oct. 8, 1959	52.83	—	—	O	D
Nok 680	41°31'49"	71°31'08"	F. B. Blatchford	123	Du	7.8	36	—	Aug. 17, 1954	3.43	—	57	T	D
Nok 686	41°32'38"	71°31'07"	G. E. Tefft	164	Du	37.5	36	37.5	Aug. 23, 1954	32.48	—	—	O	D
Nok 690	41°32'25"	71°31'02"	G. G. Anderson	136	Dn	22	2	—	Aug. 26, 1954	10.78	—	55	O	D
Nok 691	41°32'16"	71°31'01"	K. Moore	142	Du	20.1	36	—	do.	17.91	—	—	O	D
Nok 695	41°32'00"	71°31'01"	W. A. Smith	127	Du	5.6	36	—	Aug. 27, 1954	2.78	—	—	O	D
Nok 697	41°32'56"	71°30'38"	O. R. Hallene	175	Du	10.1	36	—	do.	6.2	—	57	T	D
Nok 716	41°32'35"	71°30'49"	J. Fraties	155	Dr	65	6	—	Sept. 10, 1954	30.03	—	—	O	D
Nok 895	41°32'33"	71°30'41"	State of Rhode Island	175	Dn	40	2	—	—	—	—	—	O	T
														Dry

Nok 1166	41°32'01"	71°30'07"	U.S. Geol. Survey	155	Dn	26.0	2½	—	—	—	—	O,T	T	Dry
Nok 1168	41°34'01"	71°31'04"	do.	216	Dn	16.0	2½	—	—	—	—	T	T	Dry
Nok 1170	41°33'44"	71°31'07"	do.	205	Dn	12.1	2½	—	—	—	—	T	T	Dry
Nok 1171	41°32'30"	71°30'27"	do.	162	Dn	39.0	2½	—	—	—	—	O,T	T	Porosity 22.8%, specific yield 21.5%; Dry
Nok 1190	41°32'50"	71°29'22"	Town of North Kingstown	65	Je	81	2½	—	—	—	—	O	T	
Nok 1231	41°32'25"	71°30'02"	U.S. Geol. Survey	163	Dn,Dr	187.5	4,2½	174.4	Nov. 10, 1958	62.69	—	O,T,R	T	P
Nok 1232	41°34'02"	71°30'49"	do.	220	Dn	19.9	4	—	—	—	—	T	T	
Nok 1234	41°32'00"	71°30'21"	H. E. Fountain	152	Du	36.2	24	—	Oct. 8, 1959	33.85	—	O	D	
Nok 1237	41°31'41"	71°30'08"	H. W. Tucker	142	Dn,Je	36	2½	—	Mar., 1962	5	36	O,T	T	
Nok 1239	41°31'35"	71°30'15"	do.	142	Dn,Je	80	2½	80	do.	7.8	35	O,T	T	
Nok 1240	41°31'49"	71°29'52"	do.	146	Dn,Je	31	2½	—	Apr., 1962	6	10	O,T	T	
Nok 1241	41°31'56"	71°29'54"	do.	152	Dn,Je	61	2½	—	do.	28.5	—	O,T	T	
Nok 1242	41°31'34"	71°30'10"	do.	138	Dn,Je	68	2½	68	do.	1.4	—	O,T	T	
Nok 1244	41°31'38"	71°30'19"	do.	150	Dn,Je	86	2½	—	do.	15.5	20	O,T	T	

TOWN OF RICHMOND

Ric 78	41°32'10"	71°38'05"	G. A. Hopkins	305	Dr	148	6	30	Jan., 1946	25	10	R	D,S	
Ric 160	41°30'06"	71°36'37"	C. Shepard	122	Dn	29.0	2	—	July 22, 1954	18.35	—	T	D	
Ric 162	41°31'11"	71°37'06"	L. F. Conlon	305	Du	24.4	30	24.4	do.	18.45	—	T	D	
Ric 163	41°32'41"	71°37'21"	A. Lacas	360	Du	—	48	—	Aug., 1954	4	—	58	T	A C
Ric 167	41°32'25"	71°37'01"	W. T. Sherman	350	Du	16.1	24	16.1	Aug. 4, 1954	13.50	—	55	T	A
Ric 169	41°27'06"	71°37'05"	N. Lamphere	104	Du	12.5	48	—	Nov. 2, 1954	3.45	—	54	T	D
Ric 175	41°27'16"	71°37'05"	G. Kinnear	120	Dr	60	6	25	—	—	15	—	R	D
Ric 176	41°27'24"	71°37'07"	A. Kyle	118	Du	14.7	30	14.7	Nov. 4, 1954	10.23	—	—	T	D
Ric 179	41°28'07"	71°37'09"	E. C. Drake	147	Dr	204	6	10	Nov., 1954	—	10	—	R	D
Ric 180	41°28'13"	71°37'03"	do.	104	Du	5.6	40	—	Nov. 4, 1954	2.90	—	55	T	A
Ric 181	41°28'22"	71°36'56"	M. Bouchard	107	Dn	15	2	—	Nov., 1954	10	—	—	O	D
Ric 183	41°28'44"	71°37'08"	H. Hagen	112	Dn	20	2	—	do.	20	—	—	O	D
Ric 185	41°28'47"	71°37'17"	E. White	115.22	Du	18.3	30	—	May 26, 1960	16.40	—	—	O	O
Ric 187	41°29'13"	71°37'01"	H. W. Chase	130	Du	28.0	30	—	Nov. 8, 1954	24.17	—	—	O	D
Ric 188	41°29'15"	71°36'55"	W. Leino	130	Du	28.0	36	—	do.	22.74	—	—	O	D
Ric 189	41°28'51"	71°36'57"	C. Larned	110	Du	13	30	—	Nov., 1954	8	—	—	O	D
Ric 190	41°29'22"	71°37'00"	H. E. Briggs	128	Du	32	36	—	do.	28	—	—	O	D
Ric 192	41°29'24"	71°37'14"	L. Andre	135	Du	18.3	36	—	Nov. 8, 1954	15.24	—	52	O	A
Ric 194	41°29'38"	71°36'56"	F. E. Dawley	160	Dr	40	6	3	Nov., 1954	28	3½	—	R	D
Ric 195	41°29'42"	71°37'11"	L. H. Debaene	140	Du	12.1	36	—	Nov., 1954	6.51	—	54	O	D
Ric 196	41°29'42"	71°37'25"	E. Andre	140	Du	19.6	36	—	Nov. 8, 1954	13.24	—	52	O	—
Ric 197	41°29'37"	71°37'22"	F. Lynch	145	Dr	130	6	40	—	—	2	—	R	A
Ric 198	41°29'39"	71°37'28"	J. E. Smith	125	Du	20.8	36	—	Nov. 9, 1954	16.68	—	53	O	D
Ric 218	41°29'48"	71°36'46"	A. Kitchen	138	Du	20.0	36	—	do.	13.89	—	54	T	D
Ric 219	41°29'57"	71°36'42"	W. E. Travers	135	Du	15.3	36	15.3	do.	7.37	—	57	T	D
Ric 220	41°28'32"	71°36'35"	J. L. Partyka	105.26	Du	10.3	6	—	Aug. 20, 1959	7.83	—	—	O	O
Ric 221	41°28'36"	71°36'26"	R. Chase	107	Dn	19.5	2	—	Nov., 1954	12	—	—	O	D
Ric 222	41°28'30"	71°36'24"	H. Lambert	99	Du	11	36	—	do.	6	—	—	O	D
Ric 322	41°27'47"	71°36'14"	U.S. Geol. Survey	96	Dn	112.8	2½	112.8 ¹	Dec. 18, 1957	2.01	—	49	O,T	T P
Ric 323	41°28'45"	71°36'53"	do.	109	Dn	130.5	2½	(1)	Dec. 23, 1957	9.96	—	53	O,T	P
Ric 324	41°27'14"	71°37'02"	do.	92.67	Dn	6.35	1½	—	Aug. 20, 1959	3.96	—	—	O	O W

Table 12. — Records of selected wells — Continued

Well no.	Location		Owner	Altitude above mean sea level (feet)	Type of well	Depth of well (feet)	Diameter (inches)	Depth to bedrock (feet below land surface)	Date of measurement	Water			Use	Remarks
	Latitude	Longitude								Level (feet below land surface)	Yield (gpm)	Temperature (°F)		
TOWN OF SOUTH KINGSTOWN														
Sok 1	41°29'25"	71°32'46"	State of Rhode Island	106	Du	26	36	—	Aug., 1956	11	450	—	A	
Sok 3	41°29'18"	71°31'41"	do.	200	Dr	600	8	20	Nov., 1947	—	20	—	A	C
Sok 6	41°29'18"	71°32'11"	do.	111.89	Dr	34	10	90	Aug. 23, 1959	11.41	—	—	O	W
Sok 8	41°28'31"	71°32'06"	Kingston Fire Department	150	Du	4	36	—	1930	—	50	—	PS	C, spring
Sok 10	41°28'48"	71°31'25"	Village of Kingston	244.45	Du	18.0	36	18.0	Nov. 14, 1957	14.82	—	—	T	O
Sok 68	41°26'04"	71°32'03"	Wakefield Water Co.	101	Dn	76	2½	76	Oct. 15, 1941	5.58	54	—	O	T
Sok 81	41°26'04"	71°32'03"	do.	106	Dr	75	12	—	Mar. 2, 1942	3.0	700	51	O	PS
Sok 83	41°26'04"	71°32'11"	do.	99.15	Dr	27.5	8	—	Aug. 20, 1959	5.69	—	—	O	O
Sok 84	41°26'03"	71°32'11"	do.	99	Dr	55	12	—	Jan., 1945	—	800	52	O	PS
Sok 90	41°26'02"	71°31'29"	do.	130	Dr	83	8	83	Feb., 1949	23	—	—	O	A
Sok 91	41°26'01"	71°32'14"	do.	95	Dr	54	12	76	Mar. 21, 1949	.3	560	52	O	PS
Sok 92	41°29'25"	71°32'46"	State of Rhode Island	103	Dr	131	12	132	Mar., 1949	8	950	52	O	PS
Sok 102	41°24'23"	71°33'29"	R.H.I. Goddard	160	Dr	175	6	—	June, 1948	70	40	57	O,T	D
Sok 103	41°24'00"	71°33'30"	E. Collette	145	Dr	115	6	—	Mar., 1948	50	25	—	O,T	D
Sok 105	41°28'21"	71°33'32"	Girl Scouts of America	105	Dr	165	8	—	Sept., 1949	15	40	50	O	PS
Sok 108	41°28'51"	71°31'32"	Kingston Fire District	250	Dr	200	6	15	1902	—	13	—	R	A
Sok 109	41°28'28"	71°32'07"	do.	145	Dr	30	6	19	—	—	—	—	R	A
Sok 138	41°29'25"	71°32'46"	State of Rhode Island	105	Dr	70	12	—	May, 1948	10	250	—	O	PS
Sok 165	41°25'16"	71°33'27"	C. B. Perkins	119	Du	7.6	30	—	July 14, 1954	7.45	—	—	T	D
Sok 167	41°24'46"	71°33'15"	W. Kenyon	100	Dr	95	6	—	1950	15	20	57	O,T	D,S
Sok 297	41°23'27"	71°31'40"	C. C. Bliss	40	Dr	80	6	55	1934	40	10	—	R	D,S
Sok 298	41°23'41"	71°31'48"	E. Beresford	40	Dr	80	6	—	Aug., 1954	30	—	—	O,T	D
Sok 300	41°30'34"	71°34'45"	W. P. Buffon	140	Du	14.4	30	—	July 16, 1954	13.5	—	59	O	D
Sok 303	41°30'17"	71°34'45"	N. E. Hargraves	125.52	Du	9.0	30	—	Aug. 19, 1959	6.52	—	56	O	D,O
Sok 305	41°30'12"	71°35'30"	H. C. Covell	127	Dn	18	2	—	July, 1954	12	—	—	O	D,S
Sok 310	41°30'57"	71°36'05"	L. H. Whitford	130	Dr	63	6	18	July, 1954	14	—	—	R	D,S
Sok 311	41°31'06"	71°36'04"	W. E. Millmather	126	Du	15.8	30	—	July 19, 1954	13.47	—	—	O	D
Sok 314	41°30'33"	71°35'43"	E. E. Kenyon	128	Du	16.6	36	—	July 20, 1954	13.06	—	—	O	D
Sok 315	41°30'32"	71°35'18"	P. L. Perry	135	Dn	50	2	—	Aug., 1954	32	—	50	O	D
Sok 318	41°31'06"	71°36'16"	G. E. Vanstone	126	Du	11.5	30	—	July 21, 1954	10.7	—	—	O	A
Sok 321	41°31'10"	71°36'30"	O. Greene	170	Du	12	36	12	July, 1954	10.5	—	—	T	A
Sok 322	41°30'32"	71°36'24"	E. C. Kenyon	117	Du	9.5	36	—	July 21, 1954	7.50	—	—	O	D
Sok 325	41°30'12"	71°36'23"	P. Blanchard	125	Du	19.2	30	—	July 22, 1954	18.18	—	53	O	D
Sok 329	41°30'26"	71°36'31"	L. Titus	116	Du	7.3	36	—	Aug. 4, 1954	5.58	—	—	O	D
Sok 330	41°30'08"	71°33'58"	F. D. MacKenzie	130	Dn	26	2	—	Aug., 1954	22	—	—	O	D
Sok 331	41°30'19"	71°33'51"	H. D. Mackie	125	Du	12.7	30	—	Aug. 5, 1954	9.95	—	52	O	D

Sok 332	41°30'03"	71°33'52"	C. Eden	117	Du	3.8	30	—	do.	2.61	—	59	O	D
Sok 336	41°30'42"	71°33'58"	W. P. Sheffield	165	Du	16.0	30	—	do.	11.97	—	52	T	A
Sok 337	41°30'27"	71°33'37"	W. Howard	180	Du	6.5	36	—	do.	4.47	—	58	T	D
Sok 339	41°30'05"	71°32'40"	L. Richardson	115	Du	17.5	36	—	Aug. 7, 1954	15.71	—	53	O	D
Sok 346	41°23'43"	71°31'59"	R. Freeman, Jr.	30	Dr	242	6	100	1954	—	12	—	R	D
Sok 362	41°24'14"	71°32'22"	E. St. J. Chaffee	80	Dr	360	6	180	—	40	30	—	R	D
Sok 363	41°24'29"	71°32'37"	H. P. Homans	120	Dr	260	6	228	June, 1953	42	25	—	R	D
Sok 365	41°24'04"	71°32'21"	J. B. Chaffee	60	Dr	360	8	210	Dec., 1951	54	9	—	R	D
Sok 369	41°23'47"	71°32'32"	T. E. Steere	30	Dr	75	6	—	1924	25	30	—	O,T	D
Sok 370	41°23'41"	71°32'31"	H. M. Danforth	20	Dr	80	6	—	Aug., 1954	15	20	—	O,T	D
Sok 372	41°23'46"	71°32'58"	J. V. Merrick	45	Dr	170	6	100	—	—	—	—	R	D
Sok 373	41°23'44"	71°33'00"	do.	45	Du	37.3	36	—	Aug. 25, 1954	34.84	—	—	O	D
Sok 374	41°23'53"	71°33'19"	E. A. Sherburne	100	Dr	110	6	—	1930	8	10	—	O,T	D
Sok 388	41°24'06"	71°33'47"	G. W. Korper	130	Dr	114	6	100	1947	—	25	—	R	D
Sok 405	41°24'10"	71°32'02"	E. E. Hale	60	Dr	90	6	—	—	—	—	—	O,T	D
Sok 406	41°24'12"	71°31'55"	C. F. Almy	45	Dr	80	6	—	Sept. 8, 1954	11.63	—	—	O,T	D
Sok 408	41°24'25"	71°31'57"	I. Browning	70	Dr	60	6	45	do.	27.3	10	—	R	D,S
Sok 409	41°24'29"	71°32'09"	A. Harkness	110	Dr	106	6	—	1952	65	15	—	O,T	D
Sok 415	41°24'38"	71°32'02"	F. Richmond	100	Dr	128	6	60	—	—	—	—	R	D
Sok 420	41°24'39"	71°31'50"	C. H. Durfee	75	Dr	160	6	32	1935	10	50	—	R	D
Sok 421	41°24'12"	71°32'13"	A. Peck	90	Dr	95	6	—	1946	35	8	—	O,T	D
Sok 423	41°24'43"	71°31'36"	G. F. Causey	80	Dr	134	6	65	Feb., 1951	20	15	—	R	D
Sok 427	41°24'53"	71°31'38"	R. E. McConnell	105	Dr	200	6	100	1931	15	20	—	R	D
Sok 429	41°25'08"	71°31'53"	W. H. Townsend	120	Dr	150	6	53	1928	—	20	—	R	D,S
Sok 430	41°25'06"	71°31'54"	do.	110	Du	3.5	36	—	Sept. 9, 1954	1.50	—	—	O	A
Sok 431	41°25'02"	71°31'33"	A. R. Taylor	95	Dr	80	6	—	do.	16.16	15	—	O,T	D
Sok 434	41°25'19"	71°31'29"	C. G. Congden	100	Dr	239	6	71	1928	—	10	—	R	D
Sok 435	41°25'16"	71°31'25"	T. W. Taylor	90	Dr	300	6	40	1917	15	20	—	R	D
Sok 437	41°25'17"	71°31'19"	M. F. Cocroft	70	Dr	250	6	40	—	—	—	—	R	D
Sok 445	41°29'08"	71°35'13"	A. W. Carlson	175	Dr	60	6	20	1954	—	1	—	R	D
Sok 446	41°30'11"	71°31'50"	E. W. Garder	112	Du	8.5	36	—	Aug. 6, 1954	6.38	—	55	O	D
Sok 447	41°30'15"	71°32'24"	R. F. Freeman	104	Du	5.9	30	—	do.	8.39	—	—	O	D
Sok 452	41°30'16"	71°36'06"	S. H. Cornell	126.94	Du	16.6	36	—	Aug. 20, 1959	14.52	—	—	O	D,O
Sok 457	41°30'07"	71°35'33"	L. P. Cottman	125	Dn	18	2	—	Aug., 1954	18	—	—	O	D
Sok 461	41°30'02"	71°34'45"	R. Jarvis	121	Dn	10	2	—	Sept., 1954	6	—	—	O	D
Sok 462	41°30'00"	71°32'05"	W. Standeven, Jr.	142	Dn	53.5	2	—	1952	41	—	—	O	D
Sok 470	41°25'50"	71°32'28"	M. T. Tucker	115	Du	23.3	36	—	Sept. 30, 1954	19.45	—	—	O	D
Sok 472	41°25'47"	71°32'41"	R. Brown	122	Dn	82	2	—	Oct., 1954	25	—	—	O	D
Sok 473	41°25'40"	71°32'52"	B. Brown	116	Dn	43.9	2	—	Oct. 1, 1954	21.20	—	54	O	D
Sok 474	41°25'39"	71°33'09"	M. A. Stedman	112	Du	23.2	36	—	Oct. 1, 1954	16.80	—	—	O	D
Sok 475	41°25'40"	71°33'20"	S. E. Tucker	116	Du	21.5	36	—	Oct. 4, 1954	17.25	—	54	O	D
Sok 476	41°25'41"	71°33'28"	G. Tucker	108	Du	17.5	36	—	Oct., 1954	17	—	—	O	D
Sok 478	41°25'23"	71°33'43"	H. Pierson	104	Du	13.1	48	—	Oct. 4, 1954	9.09	—	59	O	D
Sok 480	41°25'34"	71°33'39"	E. B. Brown	107	Du	18.6	36	—	Oct. 5, 1954	14.13	—	56	O	A
Sok 481	41°25'43"	71°33'37"	A. E. Lownes	107.02	Du	14.3	36	—	July 27, 1955	13.93	—	—	O	O
Sok 483	41°25'28"	71°34'13"	G. Tucker	135	Du	34.6	36	—	Oct. 6, 1954	25.38	—	—	T	A
Sok 484	41°25'33"	71°34'05"	do.	94	Du	8.4	36	—	do.	2.04	—	56	O	D

Table 12. Records of selected wells—Continued

Well no.	Location		Owner	Water										Remarks	
	Latitude	Longitude		Altitude above mean sea level (feet)	Type of well	Depth of well (feet)	Diameter (inches)	Depth to bedrock (feet below land surface)	Date of measurement	Level (feet below land surface)	Yield (gpm)	Temperature (°F)	Water-bearing material		Use
TOWN OF SOUTH KINGSTOWN—Continued															
Sok 485	41°25'48"	71°33'31"	do.	109	Dn	18	2	—	Oct., 1954	17	—	—	O	D	
Sok 486	41°25'50"	71°33'57"	A. Holley	92	Dn	10	2	—	do.	2	—	—	O	A	
Sok 487	41°25'16"	71°34'30"	W. H. Webster	135	Du	26.9	24	22	Oct. 6, 1954	21.20	—	—	T,R	D	
Sok 488	41°25'42"	71°34'28"	S. F. Tucker	98	Du	10.6	36	—	Oct. 7, 1954	5.30	—	56	O	D	
Sok 489	41°25'47"	71°34'55"	M. J. Enos	93	Dn	55	2	—	do.	.95	—	56	O	D	
Sok 493	41°25'51"	71°35'06"	W. H. Pilz	97	Du	9.4	36	—	do.	4.42	—	56	O	D	C
Sok 495	41°25'50"	71°35'20"	W. Shea	104	Dn	19	2	—	Oct., 1954	18	—	—	O	D	
Sok 496	41°25'55"	71°35'23"	W. Tucker	108	Du	18.8	30	—	Oct. 21, 1954	15.89	—	—	O	D	
Sok 502	41°26'00"	71°35'18"	J. Tougas	97	Du	8.8	36	—	do.	6.14	—	56	O	D	
Sok 504	41°26'00"	71°35'50"	H. Card	160	Dr	143	6	21	Oct., 1954	12	3	—	R	D,S	
Sok 505	41°26'00"	71°35'50"	do.	162	Du	19.2	30	19.2	Oct. 27, 1954	18.71	—	—	T	A	
Sok 508	41°25'36"	71°35'18"	W. Snow	100	Du	11.2	30	—	Oct. 29, 1954	9.70	—	53	O	D	
Sok 509	41°25'00"	71°35'13"	J. Yemma	110.01	Du	17.8	40	—	Aug. 20, 1959	12.58	—	55	O	D,O	W
Sok 510	41°24'57"	71°35'05"	do.	107.86	Du	10.0	30	—	Aug. 23, 1956	7.92	—	—	O	O	W
Sok 511	41°24'59"	71°34'38"	W. Webster	130	Du	9.3	30	—	Nov. 1, 1954	5.49	—	52	O	A	
Sok 512	41°28'39"	71°35'58"	C. G. Congdon	117	Du	22.7	30	—	Nov. 9, 1954	18.39	—	53	O	D,S	C
Sok 513	41°28'49"	71°35'50"	C. Prest	110	Du	16.8	30	—	Nov. 9, 1954	7.39	—	53	O	A	
Sok 514	41°29'33"	71°35'13"	C. A. King	225	Du	24.8	30	24.8	do.	18.16	—	54	T	D,S	W
Sok 515	41°29'23"	71°36'16"	R. Holley	127.97	Du	30.4	36	—	Aug. 23, 1959	27.92	—	—	O	O	
Sok 516	41°29'48"	71°35'37"	R. Reed	120	Dn	20	1¼	—	Nov., 1954	16	—	—	O	D	
Sok 517	41°29'52"	71°35'39"	L. Brackett	123	Dn	22	2	—	do.	15	—	51	O	D	
Sok 518	41°29'43"	71°35'28"	E. R. McNulty	185	Du	20.2	36	17	Nov. 10, 1954	15.34	—	53	T,R	D	
Sok 519	41°29'52"	71°35'24"	C. Browning	145	Du	20.3	36	—	do.	16.00	—	52	T	D	
Sok 521	41°29'59"	71°35'25"	H. C. Covell	138	Du	29.2	40	—	do.	25.93	—	—	O	D	
Sok 522	41°29'59"	71°35'17"	R. H. Ross	132	Du	17.6	36	—	do.	12.44	—	53	O	D	
Sok 526	41°29'50"	71°35'00"	E. Tisserand, Jr.	130	Du	12.2	36	—	do.	8.67	—	—	O	D	
Sok 529	41°29'43"	71°34'36"	W. Potter	125	Du	16.4	36	—	Nov. 12, 1954	10.74	—	54	O	D	W
Sok 530	41°29'43"	71°34'35"	A. Henderson	124.65	Du	12.2	36	—	Aug. 19, 1959	9.42	—	—	O	O	
Sok 533	41°29'38"	71°34'30"	T. Conrad	114	Du	9.8	36	—	Nov. 12, 1954	6.07	—	57	O	D	
Sok 535	41°29'45"	71°34'48"	W. Peckham	128	Dn	22	2	—	Nov., 1954	5	—	—	O	D	
Sok 537	41°29'52"	71°34'44"	Town of South Kingstown	121	Du	6.4	36	—	Nov. 12, 1954	2.44	—	48	O	A	
Sok 538	41°29'59"	71°34'45"	C. Robinson	123	Du	9.7	36	—	do.	5.53	—	51	O	D	
Sok 541	41°29'52"	71°34'20"	L. Martin	129	Du	14.7	36	—	Nov. 15, 1954	9.80	—	—	O	D	
Sok 543	41°29'58"	71°34'18"	E. A. Mignault	121	Du	8.8	36	—	do.	4.72	—	52	O	D	
Sok 546	41°29'56"	71°34'07"	D. Card	127	Du	13.0	48	13.0	do.	9.32	—	49	O	D	
Sok 547	41°29'59"	71°33'46"	H. W. Huntington	139	Dr	150	6	25	do.	18.24	—	—	R	D	
Sok 549	41°29'39"	71°34'15"	E. J. Hoyle	120	Du	15.2	30	—	do.	10.83	—	—	O	D,S	

Sok 551	41°29'32"	71°33'55"	J. J. Cottrell	118	Du	12.0	40	—	do.	7.58	—	53	O	D	
Sok 553	41°29'31"	71°33'38"	A. J. Newman	115	Du	15.5	36	—	Nov. 16, 1954	9.52	—	54	O	D	
Sok 554	41°29'38"	71°33'38"	do.	119	Du	15.6	36	—	do.	11.17	—	—	O	D	
Sok 559	41°29'22"	71°33'32"	L. Bernier	112	Du	16.4	36	—	Nov. 17, 1954	10.30	—	—	O	D	
Sok 562	41°29'19"	71°33'21"	A. H. Kenyon	116	Dn	20	2	—	Nov., 1954	16	—	55	O	D	C
Sok 563	41°29'24"	71°33'20"	J. Britcliffe	119	Du	22.9	36	—	Nov. 17, 1954	18.93	—	—	O	D	
Sok 564	41°29'30"	71°33'03"	—	119	Du	22.1	36	—	do.	21.15	—	—	O	A	
Sok 566	41°29'12"	71°33'35"	R. H. Bristow	115	Du	17.6	36	—	do.	12.50	—	—	O	D	
Sok 571	41°29'13"	71°33'47"	W. Larmie	113	Du	15.5	36	—	Nov. 18, 1954	11.41	—	—	O	D	
Sok 572	41°29'04"	71°33'42"	J. Allen and G. West	114	Du	15.3	36	—	do.	10.65	—	—	O	D	
Sok 577	41°29'10"	71°33'52"	V. Arnold	112	Du	13.8	36	—	do.	9.67	—	—	O	D,S	
Sok 579	41°29'30"	71°34'23"	F. Word	115	Du	10.4	40	—	do.	7.34	—	51	O	D	
Sok 580	41°29'14"	71°34'00"	J. L. Gough	109	Du	9.8	36	—	do.	5.90	—	—	O	D,S	
Sok 581	41°28'46"	71°35'01"	J. W. Sweeney	112	Dr	230	8	70	Nov., 1954	18	10	—	R	D	
Sok 582	41°28'49"	71°35'11"	do.	123.09	Du	17.7	36	—	Oct. 2, 1957	13.12	—	55	O	O,S	C,W
Sok 583	41°28'43"	71°35'05"	G. Ainsworth	111	Du	13.6	36	—	Nov. 18, 1954	9.80	—	54	O	D	
Sok 585	41°28'39"	71°34'18"	R. Kenyon	105	Du	11.1	36	11.1	Nov. 19, 1954	7.37	—	54	O	D	
Sok 586	41°28'27"	71°34'22"	C. Butson	142	Dr	150	6	27	—	—	—	—	R	D	
Sok 587	41°28'27"	71°34'22"	do.	145	Du	27.0	40	27.0	Nov. 19, 1954	14.09	—	—	T	A	
Sok 588	41°28'26"	71°34'33"	State of Rhode Island	112	Du	10.2	36	10.2	do.	5.01	—	52	T	D	
Sok 589	41°28'57"	71°34'01"	J. C. Muldowney	112	Dn	15	1¼	—	Nov., 1954	10	—	—	O	D	
Sok 590	41°28'54"	71°34'08"	do.	109	Du	11.3	36	—	Nov. 22, 1954	8.53	—	53	O	A	
Sok 591	41°28'48"	71°34'01"	C. W. Daniel	110	Du	10.9	40	—	do.	7.24	—	—	O	D,S	
Sok 592	41°28'52"	71°33'35"	S. Dannon	113	Du	14.4	36	—	do.	10.86	—	53	O	D	
Sok 594	41°28'56"	71°33'24"	F. Dimasi	115	Du	15.3	36	—	do.	11.86	—	—	O	D	
Sok 599	41°29'10"	71°33'12"	F. E. May	117	Du	21.6	36	—	do.	17.60	—	—	O	D,S	
Sok 601	41°29'03"	71°33'39"	N.Y., N.H., & H. R.R.	112	Du	14.4	36	—	Nov. 30, 1954	11.09	—	—	O	PS	
Sok 605	41°28'57"	71°33'34"	H. Shackleton	112.11	Du	15.4	36	—	Aug. 19, 1959	11.96	—	—	O	O	W
Sok 606	41°28'56"	71°33'40"	C. K. Steere	109	Dn	22	2	—	Nov., 1954	12	—	—	O	D	
Sok 608	41°28'59"	71°33'14"	M. E. Taylor	115	Du	19.8	36	—	Dec. 1, 1954	15.95	—	53	O	D	
Sok 611	41°29'04"	71°33'28"	H. Walker	115	Du	17.4	36	—	do.	13.63	—	53	O	D	
Sok 612	41°29'10"	71°32'46"	L. May	109	Du	14.1	48	—	do.	11.40	—	—	O	D	
Sok 613	41°29'27"	71°32'23"	T. H. Philbert	119	Du	23.7	36	—	Dec. 2, 1954	20.53	—	—	O	D	
Sok 614	41°29'33"	71°32'36"	R. Becker	119	Du	26.5	36	—	do.	23.10	—	—	O	D	
Sok 615	41°29'42"	71°31'44"	C. Underwood	176.23	Du	13.5	36	—	May 17, 1956	8.28	—	52	T	D,O	W
Sok 616	41°29'42"	71°31'44"	do.	175	Du	18.0	36	18.0	Dec. 2, 1954	10.34	—	—	T	A	
Sok 617	41°29'55"	71°31'43"	State of Rhode Island	160	Du	16.3	36	16.3	do.	5.64	—	—	T	D	
Sok 618	41°28'59"	71°32'28"	do.	114	Du	16.1	40	—	do.	15.70	—	—	O	A	
Sok 619	41°28'57"	71°32'14"	do.	107	Du	8.8	30	—	do.	6.45	—	—	O	D	
Sok 620	41°28'54"	71°31'59"	F. W. Keaney	155	Dr	27	6	7	Dec., 1954	5	60	—	R	D	
Sok 621	41°29'09"	71°31'18"	D. Bluclein	235	Du	14.3	36	14.3	Dec. 2, 1954	1.89	—	—	T	D	
Sok 622	41°29'24"	71°31'13"	R. W. Harrison	242	Du	7.4	40	7.4	do.	2.64	—	52	T	D,S	
Sok 623	41°29'41"	71°31'01"	A. Peckham	235	Du	20.1	36	20.1	Dec. 3, 1954	10.96	—	55	T	D	C
Sok 624	41°29'54"	71°31'02"	J. Barnett	255	Dr	80	6	80	1950	17	2	—	T	D	
Sok 632	41°28'09"	71°33'14"	R. Simmons	104.53	Du	12.3	36	—	Aug. 19, 1959	9.35	—	—	O	D,O	W
Sok 633	41°27'03"	71°33'28"	—	103	Du	9.1	36	—	Dec. 6, 1954	4.13	—	—	O	D	
Sok 634	41°26'57"	71°33'30"	O. Kullen	98	Du	6.1	36	—	do.	3.63	—	—	T	A	

Table 12. — Records of selected wells — Continued

Well no.	Location		Owner	Water										Remarks	
	Latitude	Longitude		Altitude above mean sea level (feet)	Type of well	Depth of well (feet)	Diameter (inches)	Depth to bedrock (feet below land surface)	Date of measurement	Level (feet below land surface)	Yield (gpm)	Temperature (°F)	Water-bearing material		Use
Sok 635	41°26'45"	71°33'33"	—	96	Du	4.2	36	—	do.	.91	—	—	T	A	
Sok 636	41°26'40"	71°33'20"	H. Albro	175	Du	33.2	48	33.2	do.	28.55	—	—	T	D	
Sok 637	41°26'33"	71°33'23"	C. B. Clarke	150	Dr	76	6	27	1953	23	4	—	R	D	
Sok 639	41°26'18"	71°33'17"	W. W. Tucker	112.23	Du	19.8	36	—	Aug. 20, 1959	19.29	—	—	O	O	W
Sok 640	41°26'20"	71°33'33"	A. E. Lownes	113	Du	17.7	36	—	Dec. 7, 1954	17.7	—	—	O	A	
Sok 641	41°26'03"	71°33'20"	W. W. Tucker	101	Du	6.9	36	—	do.	6.31	—	—	O	D	
Sok 642	41°26'57"	71°33'07"	L. Lillibridge	145	Du	10.7	40	10.7	do.	6.76	—	—	O	D	
Sok 643	41°27'02"	71°32'48"	C. Tefft	143	Du	23.2	36	—	do.	18.32	—	52	O	D	
Sok 644	41°26'48"	71°32'38"	M. Irons	155	Du	26.6	40	—	do.	21.94	—	—	O	A	
Sok 645	41°26'39"	71°32'25"	do.	165	Du	9.9	60	—	do.	8.71	—	—	O	A	
Sok 646	41°26'38"	71°32'39"	H. E. Barker	125	Du	7.6	36	—	do.	2.64	—	—	O	D	
Sok 647	41°27'01"	71°32'37"	L. F. Lillibridge	143	Du	19.2	36	—	Dec. 8, 1954	16.18	—	55	O	D	C
Sok 648	41°27'03"	71°32'34"	E. A. Fitzgerald	143	Dr	101	6	33	Dec., 1954	15	10	—	R	D,S	
Sok 649	41°27'12"	71°32'08"	S. Tucker	155	Du	12.3	30	—	Dec. 8, 1954	8.94	—	—	O	D	
Sok 651	41°27'09"	71°31'57"	E. Caswell	145	Du	11.0	36	—	do.	6.65	—	—	O	D	
Sok 656	41°27'30"	71°31'49"	J. E. Hall	145	Du	15.3	120	—	do.	8.53	—	—	O	D,S	
Sok 657	41°27'39"	71°31'37"	G. Mason	140	Du	12.1	36	2	do.	3.77	—	—	R	D	
Sok 660	41°28'53"	71°35'33"	J. McGarry	125	Dr	128	6	13	Mar., 1952	—	5	—	R	D	
Sok 661	41°29'03"	71°34'36"	H. R. Riley	145	Dr	145	6	120	1947	—	2	—	R	D	
Sok 663	41°28'32"	71°31'31"	H. F. Stuart	230	Dr	93	6	16	1925	30	29	—	R	D	
Sok 666	41°28'28"	71°31'54"	A. Goshdigan	200	Du	12.4	36	—	Jan. 11, 1955	.94	—	—	T	D,S	Flowed
Sok 682	41°27'34"	71°31'12"	G. Stackus	126.27	Du	14.9	36	—	Oct. 21, 1955	6.95	—	—	O	O	W
Sok 686	41°27'26"	71°31'19"	J. T. Lillibridge	157.35	Du	21.6	48	—	do.	16.74	—	—	O	O	W
Sok 689	41°27'15"	71°31'46"	A. B. Congden	155	Dn	18	2½	—	Jan. 27, 1955	13.65	5	—	O,T	D	
Sok 693	41°26'45"	71°31'30"	S. Stedman	195	Dr	325	6	35	1925	35	7	—	R	D	
Sok 718	41°24'58"	71°34'09"	T. Browning	120	Du	12.3	36	—	Feb. 10, 1955	9.81	—	—	O	A	
Sok 719	41°27'05"	71°35'36"	State of Rhode Island	160	Du	20.4	30	—	Feb. 11, 1955	9.19	—	—	T	A	
Sok 735	41°29'03"	71°33'39"	State of Rhode Island	115	Dn	30	2	—	—	—	—	—	O	T	
Sok 745	41°24'58"	71°34'47"	E. Potter	130	Du	16.5	30	—	May 25, 1955	16.10	—	—	O	D	
Sok 749	41°25'44"	71°33'37"	A. E. Lownes	107.09	Dr	95	6	—	Aug. 20, 1959	13.52	—	—	O	O	W
Sok 865	41°27'59"	71°35'03"	U.S. Geol. Survey	95.32	Du	7.0	8	—	Aug. 23, 1959	.84	—	—	O	O	W
Sok 867	41°24'52"	71°33'06"	E. W. Kittredge	95.40	Du	11.5	30	—	Nov. 2, 1956	3.78	—	—	O	O	W
Sok 868	41°27'48"	71°33'19"	U.S. Geol. Survey	94.78	Dn	10.2	1¼	—	Aug. 19, 1959	1.94	—	—	O	O	W
Sok 869	41°25'51"	71°35'22"	do.	115	Dn	85.9	2½	85.9	Oct. 24, 1957	21.07	—	58	O,T	T	P
Sok 870	41°25'46"	71°34'08"	do.	96	Dn	112.2	2½	112.2	Oct. 28, 1957	4.53	—	58	O,T	T	P
Sok 871	41°25'38"	71°33'34"	do.	108	Dn	185.5	4,2½	(1)	Nov. 12, 1957	16.82	—	54	O,T	T	P

Sok 872	41°27'48"	71°33'19"	do.	95	Dn	175.5	4,2½	—	Nov. 22, 1957	1.30	—	52	O,T	T	P, porosity 46.2%, specific yield 39.3%
Sok 873	41°28'55"	71°33'03"	do.	105	Dn	182.9	4,2½	—	Dec. 9, 1957	7.22	—	56	O,T	T	Porosity 27.2%, specific yield 26.5%
Sok 874	41°27'59"	71°34'59"	do.	97	Dn	28.5	2½	—	Dec. 17, 1957	2.20	—	44	O	T	P
Sok 876	41°28'48"	71°34'31"	do.	103	Dn	12.8	2½	—	Dec. 20, 1957	3.39	—	46	O,T	T	P
Sok 877	41°28'48"	71°34'31"	do.	105	Dn	27.9	2½	—	—	—	—	—	O,T	T	P
Sok 878	41°30'13"	71°35'47"	do.	117	Dn	102.1	2½	(1)	Dec. 23, 1957	4.65	—	53	O,T	T	P
Sok 879	41°30'21"	71°35'09"	do.	126	Dn	68.3	2½	68.3¹	Jan., 1958	13	—	48	O,T	T	P, porosity 24.6%, specific yield 23.9%
Sok 880	41°28'22"	71°35'49"	do.	96	Dn	85.3	2½	85.3¹	Jan. 22, 1958	.88	—	42	O,T	T	P
Sok 881	41°25'39"	71°32'45"	do.	118	Dn	84.5	4,2½	—	Jan. 17, 1958	22.20	—	51	O,T	T	P, porosity 45.0%, specific yield 41.3%
Sok 882	41°27'00"	71°32'35"	do.	143	Dn	11.8	2½	—	—	—	—	—	T	T	—
Sok 883	41°27'20"	71°33'19"	do.	93.82	Du	2.0	12	—	Aug. 25, 1959	1.11	—	—	O	O	W
Sok 885	41°24'45"	71°36'05"	do.	105.20	Dn	6.1	1½	—	Apr. 30, 1958	.32	—	—	O	O	W
Sok 886	41°25'36"	71°32'51"	do.	100.54	Dn	7.5	1½	—	Aug. 20, 1959	4.75	—	—	O	O	W
Sok 887	41°26'02"	71°32'09"	Wakefield Water Co.	103	Dr	51	18	—	Feb., 1958	7	1,100	—	O	PS	C
Sok 888	41°29'25"	71°32'46"	State of Rhode Island	116	Dr	138	12	—	May, 1958	21.3	800	—	O	PS	C
Sok 889	41°24'52"	71°33'05"	U.S. Geol. Survey	94	Dn,Dr	198.7	6,4,2½	178.7	Sept. 29, 1958	2.59	—	60	O,T,R	T	P, porosity 46.9%, specific yield 31.5%
Sok 890	41°25'52"	71°32'25"	do.	110	Dn,Dr	128.8	4,2½	112.8	Oct. 29, 1958	16.07	—	56	O,T,R	T	P
Sok 891	41°23'58"	71°36'00"	do.	80	Dn,Dr	115.4	6,4,2½	104.8	Oct. 27, 1958	27.65	—	56	O,T,R	T	P, porosity 24.8%, specific yield 10.1%
Sok 892	41°30'47"	71°35'41"	do.	133	Dn,Dr	92.3	2½	82.3	Dec. 29, 1958	18.78	—	50	O,T,R	T	Porosity 30.9%, specific yield 29.7%
Sok 893	41°29'34"	71°34'27"	do.	114	Dn,Dr	120.3	6,4,2½	110.3	Dec. 8, 1958	5.18	—	52	O,T,R	T	Porosity 23.5%, specific yield 12.5%
Sok 894	41°25'36"	71°31'47"	do.	115	Dn,Dr	95.5	4,2½	85.5	Nov. 18, 1958	14.49	—	52	O,T,R	T	P
Sok 895	41°25'43"	71°33'47"	U.S. Geol. Survey	101	Dn,Dr	178.5	4,2½	168.5	Nov. 6, 1958	8.01	—	55	O,T,R	T	P
Sok 896	41°27'58"	71°34'05"	do.	94	Dn,Dr	163.1	6,4,2½	153.1	Dec. 3, 1958	1.39	—	46	O,T,R	T	P
Sok 897, 898	41°29'14"	71°36'24"	do.	99	Dn,Dr	66.8	2½	56.8	Dec. 2, 1958	1.50	—	46	O,T,R	T	Porosity 36.0%, specific yield 21.4%
Sok 900	41°29'34"	71°34'26"	do.	114	Je	10.1	2	—	Sept. 8, 1959	5.47	—	—	O	O	W
Sok 901	41°29'14"	71°36'24"	do.	100	Je	10.3	2	—	do.	4.61	—	—	O	O	W
Sok 902	41°28'55"	71°33'03"	do.	102	Je	18.1	2	—	do.	7.11	—	—	O	O	W
Sok 903	41°30'47"	71°35'40"	do.	134	Je	24.7	2	—	do.	19.52	—	—	O	O	W
Sok 904	41°23'57"	71°35'58"		75	Dn	20	4	—	Sept., 1959	15	—	55	O,T	D	C
Sok 905	41°29'34"	71°34'27"	U.S. Geol. Survey	115	Dr	81	8	—	Dec. 7, 1959	4.15	—	51	O	T	A,C,P
Sok 906	41°29'14"	71°36'24"	do.	99	Dr	55.0	8	—	Dec. 14, 1959	1.18	—	51	O,T	T	A,C,P
Sok 907	41°28'55"	71°33'03"	do.	102	Dr	180.0	8	—	Feb. 1, 1960	6.69	—	51	O,T	T	A,C,P
Sok 908	41°30'47"	71°35'41"	do.	133	Dr	75.0	8	—	Dec. 29, 1959	19.32	—	49	O,T	T	A,C,P
Sok 1017	41°28'50"	71°34'20"	Gilbane Building Co.	105	Je	46	2	46¹	Aug., 1960	8	10	—	O,T	T	—
Sok 1018	41°28'48"	71°34'10"	do.	107	Je	130	2	130¹	do.	9	5	—	O	T	—
Sok 1019	41°28'49"	71°34'25"	do.	100	Je	33	2	33¹	—	—	—	—	O,T	T	—
Sok 1022	41°28'59"	71°33'55"	do.	108	Je	191	2	191¹	—	—	—	—	O	T	—
Sok 1023	41°29'00"	71°34'14"	do.	110	Je	108	2	108¹	Aug., 1960	5.5	70	—	O	T	—
Sok 1024	41°29'00"	71°34'14"	do.	105	Je	65	2½	—	Oct. 26, 1960	4.58	—	—	O	O	—
Sok 1026	41°28'56"	71°34'16"	do.	108	Je	60	2½	—	do.	3.21	—	—	O	O	—

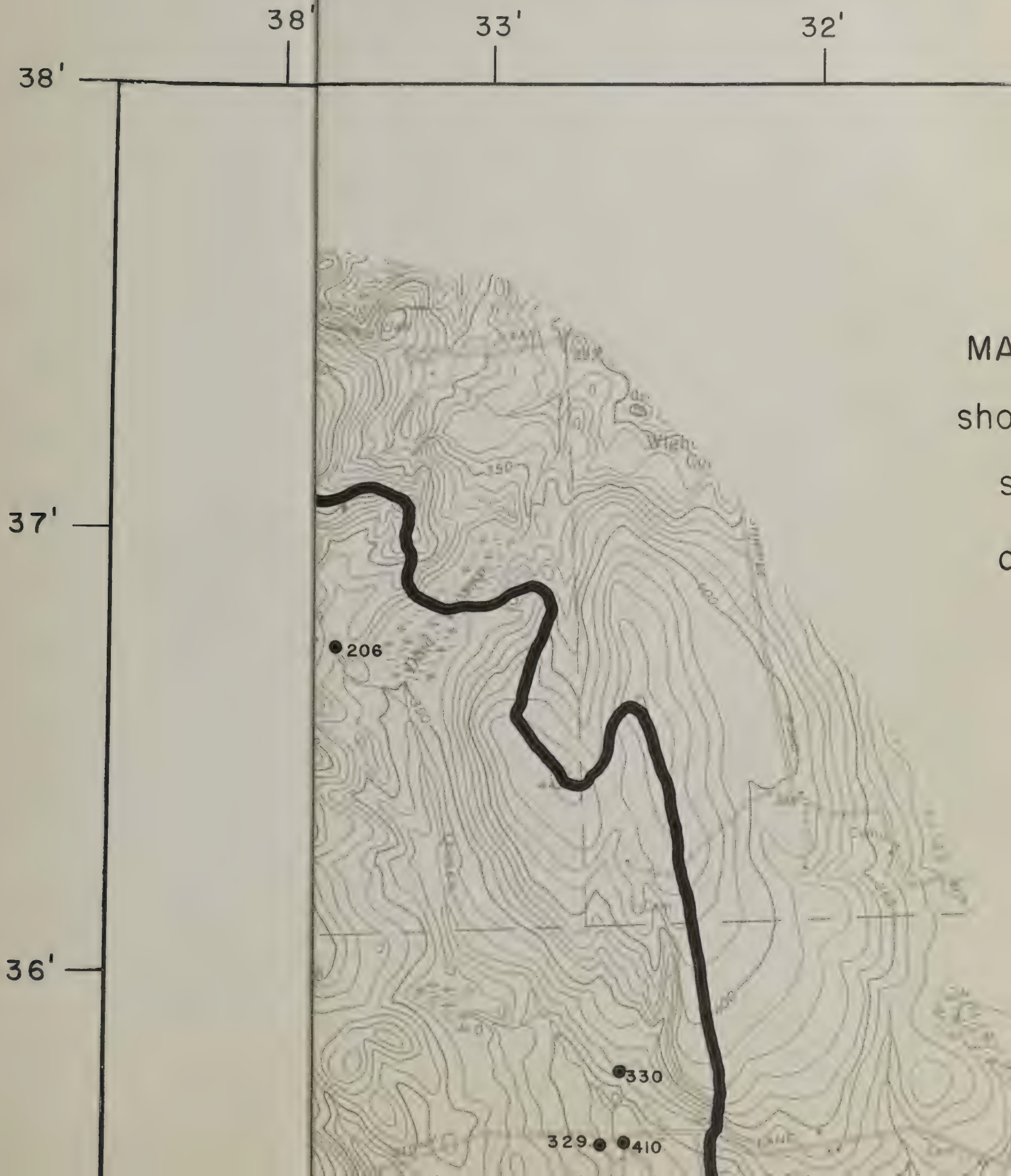
Table 12. Records of selected wells—Continued

Well no.	Location		Owner	Altitude above mean sea level (feet)	Type of well	Depth of well (feet)	Diameter (inches)	Depth to bedrock (feet below land surface)	Date of measurement	Water			Remarks		
	Latitude	Longitude								Level (feet below land surface)	Yield (gpm)	Temperature (°F)			
TOWN OF SOUTH KINGSTOWN—Continued															
Sok 1027	41°28'41"	71°34'28"	do.	98	Je	33	2	33 ¹	—	—	—	—	T	Porosity 32.6%, specific yield 29.3%	
Sok 1028	41°28'45"	71°34'17"	do.	103	Je	76	.2	76 ¹	Sept., 1960	5	10	—	T		
Sok 1032	41°28'20"	71°33'21"	U.S. Geol. Survey	98	Du	2.5	12	—	May 27, 1959	2.5	—	—	T		
Sok 1033	41°29'25"	71°32'48"	do.	95	Du	1.4	12	—	do.	1.4	—	—	T	Porosity 26.9%, specific yield 20.4%	
Sok 1034	41°29'34"	71°31'25"	do.	200	Du	3.5	12	—	do.	3.0	—	—	T	Porosity 35.1%, specific yield 12.5%	
Sok 1035	41°25'57"	71°36'03"	do.	150	Du	8.6	12	—	do.	8.0	—	—	T	Porosity 22.8%, specific yield 3.8%	
Sok 1036	41°28'41"	71°34'32"	Gilbane Building Co.	95	Je	53	2	53 ¹	—	—	—	—	T	A,C	
Sok 1037	41°28'57"	71°34'11"	do.	110	Je	55	2½	—	Oct. 26, 1960	9.91	—	—	O		
Sok 1039	41°28'48"	71°34'07"	do.	110	Dr	164	8	147	—	—	—	O,T,R	T		
Sok 1040	41°29'00"	71°34'14"	do.	105	Dr	65	18	—	Oct., 1960	5.0	725	53	O		
TOWN OF WEST GREENWICH															
Wgr 204	41°36'22"	71°34'31"	M. Harinton	346.62	Du	8.8	30	—	Oct. 2, 1957	5.75	—	60	T	O	W
Wgr 205	41°36'21"	71°33'59"	C. Ketelle	440	Du	25.4	48	15.4	Sept. 14, 1954	18.76	—	—	R	D	W
Wgr 206	41°36'45"	71°33'29"	W. Knight II.	374.26	Du	9.6	24	9.6	Oct. 17, 1955	2.85	—	55	T	D,O,S	
Wgr 213	41°36'31"	71°35'32"	H. Brown	277.49	Du	14.4	36	—	Apr. 16, 1955	4.42	—	55	O	O	C,W
Wgr 218	41°37'13"	71°33'51"	P. F. Cottenier	475	Du	14.9	40	14.9	Sept. 22, 1954	7.21	—	55	T	D	A
Wgr 231	41°36'37"	71°34'54"	H. Brown	290	Du	10.0	40	—	May 5, 1955	5.64	—	49	T	A	

¹ Boulder or bedrock.

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GEOLOGICAL WATER INVESTIGATIONS
ATING BOARD AND U. S. GEOLOGICAL SURVEY





REPORTS AND MAPS DEALING WITH GROUND-WATER CONDITIONS IN RHODE ISLAND

PUBLISHED BY THE STATE OF RHODE ISLAND AND PROVIDENCE
PLANTATIONS IN COOPERATION WITH
THE U. S. GEOLOGICAL SURVEY

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